Salaries

1·9·9·2

Analysis of the
American Chemical Society's
1992 Survey of Salaries and Employment

American Chemical Society
Washington, D.C.

SALARIES 1992

ANALYSIS OF THE AMERICAN CHEMICAL SOCIETY'S 1992 SURVEY OF SALARIES AND EMPLOYMENT

American Chemical Society
1155 16th Street, NW
Washington, DC 20036
July 1992

Available from the Distribution Office, ACS

Copyright © 1992 American Chemical Society

CONTENTS

	Page
Acknowledgements	iv
Summary and Comment	1
A Method for Estimating Average Salaries	11
List of Tables	15
Technical Notes	19
Geographic Regions	24
Tables	25
Survey Questionnaire	125
ACS Career Services Publications	129

ACKNOWLEDGEMENTS

This report presents detailed results of the 1992 ACS Salary and Employment Status Survey. A summary of the survey findings was published in the July 13, 1992, issue of *Chemical & Engineering News*.

General oversight of the survey and its analysis was provided by the ACS Joint Board-Council Committee on Economic Status, headed by Anne T. O'Brien,[1] and by its subcommittee on surveys, chaired by John S. Connolly.[2] The committee expresses its gratitude to the approximately 12,000 members who provided a valuable service to the profession by completing the survey questionnaire.

Joan Burrelli and Karen Dyson of the ACS Office of Professional Services have done an outstanding job in conducting the survey and preparing this report. Dr. Burrelli wrote the summary and comment on the following pages.

Mary L. Funke, Manager
Office of Professional Services

---

[1]Dr. Anne T. O'Brien, American Cyanamid, Medical Research Division, Pearl River, New York.

[2]Dr. John S. Connolly, Solar Energy Research Institute, Golden, Colorado.

SUMMARY AND COMMENT

The employment outlook for chemists and chemical engineers this year continued to be poor. After four years of relatively low (1%) unemployment from 1987 to 1990, the unemployment rate for chemists went up to 1.6% in 1991, and this year increased to 1.9%. Unemployment has not been this high for chemists since 1983. Salaries this year barely rose above inflation.

Salaries

Among chemists, overall median salaries increased only slightly above inflation between 1991 and 1992. As of March 1, 1992, median salaries for ACS member chemists were:

$60,000 for	PhD,	up	3.4% from 1991,	up	0.2% in constant dollars
$50,000 for	MS,	up	5.5% from 1991,	up	2.2% in constant dollars
$42,000 for	BS,	up	4.2% from 1991,	up	1.0% in constant dollars

The Consumer Price Index rose 3.2% from March 1991 to March 1992.

Salaries for MS and PhD chemists have increased, on average, about 6% per year (in current dollars) over the past decade (see Figures 1 and 2). Those for BS chemists have increased, on average, about 5% per year in current dollars. In constant dollars, median salaries of BS chemists have remained relatively unchanged and median salaries of MS and PhD chemists have increased about 1% per year since 1982, which indicates somewhat higher demand for MS and PhD chemists than for BS chemists over that period.

Chemists' Median Salaries*
(in current dollars)

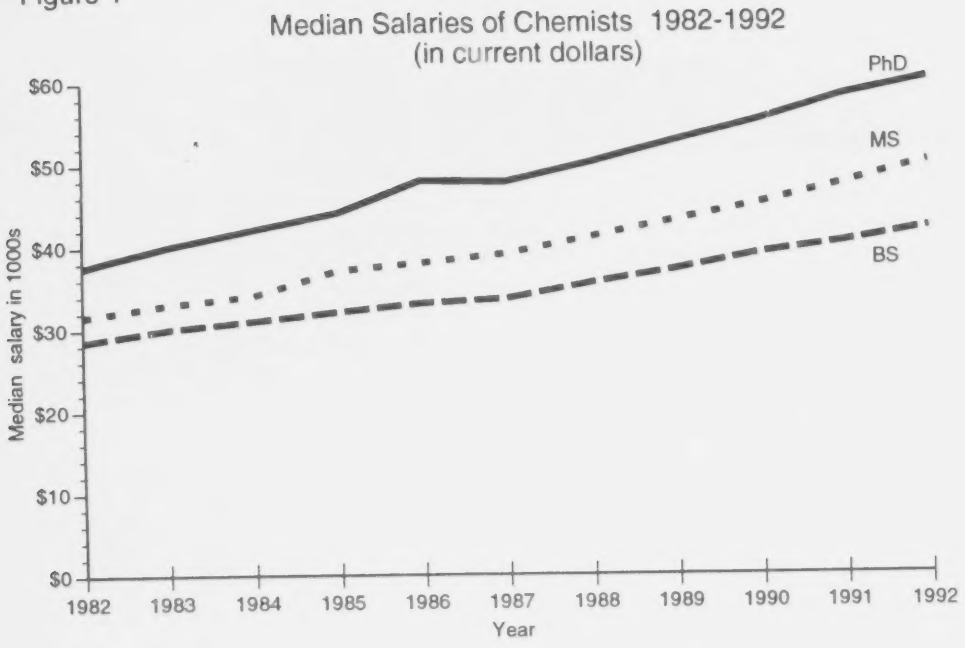
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
BS	28.5	30.0	30.9	32.0	33.0	33.5	35.4	37.0	39.0	40.3	42.0
MS	31.6	33.0	34.0	37.0	37.9	39.0	41.0	43.0	45.0	47.4	50.0
PhD	37.5	40.0	42.0	44.0	47.8	47.7	50.0	52.5	55.0	58.0	60.0

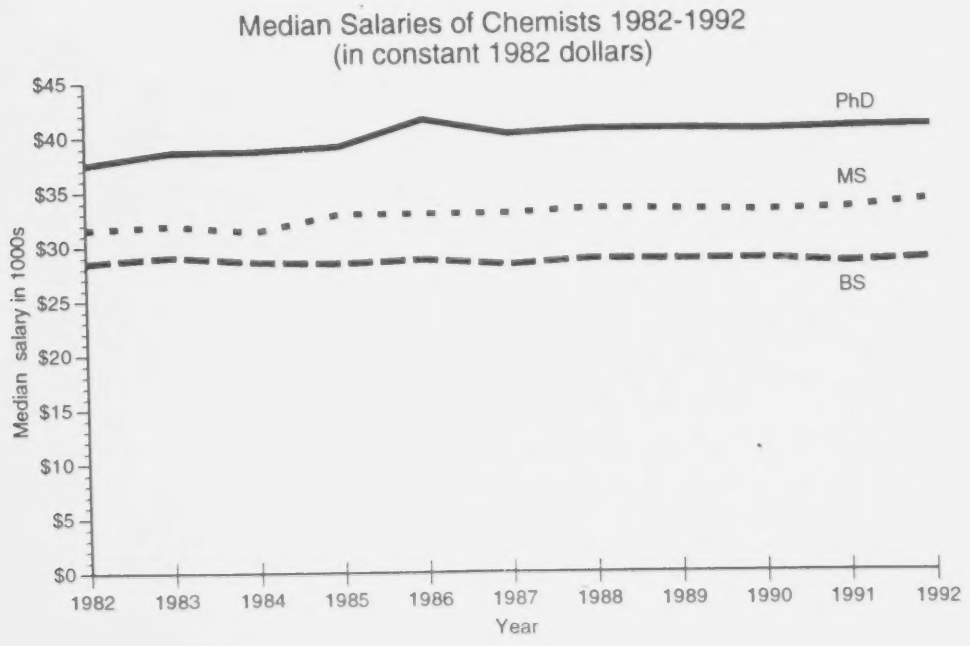
(in constant 1982 dollars)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
BS	28.5	29.0	28.5	28.4	28.7	28.2	28.7	28.6	28.6	28.2	28.5
MS	31.6	31.9	31.3	32.9	32.9	32.9	33.3	33.2	33.0	33.2	33.9
PhD	37.5	38.6	38.7	39.1	41.5	40.2	40.6	40.6	40.4	40.6	40.7

*Base annual salary in thousands of dollars

Figure 1

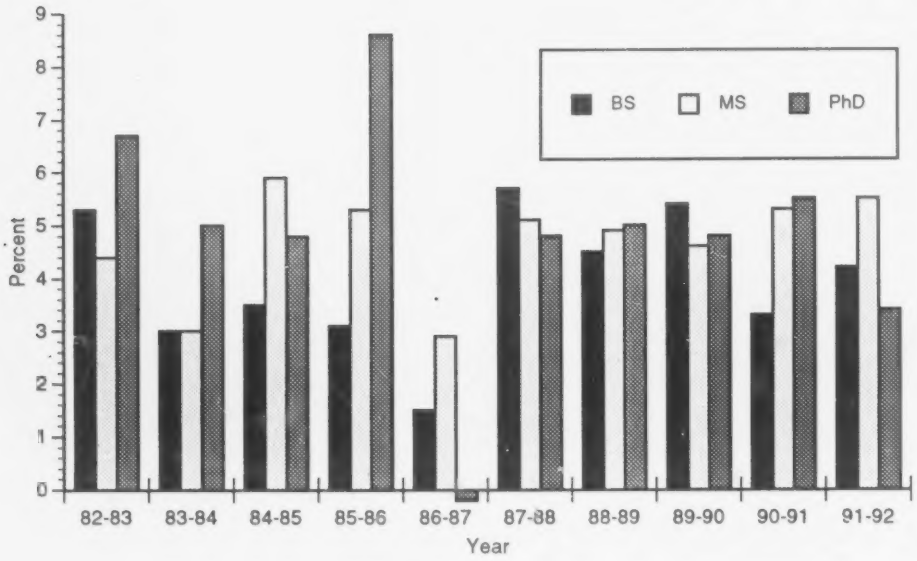




Source: ACS Salary Surveys

Figure 2

Changes in Chemists' Median Salaries 1982-1992



	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92
BS	5.3	3.0	3.5	3.1	1.5	5.7	4.5	5.4	3.3	4.2
MS	4.4	3.0	5.9	5.3	2.9	5.1	4.9	4.6	5.3	5.5
PhD	6.7	5.0	4.8	8.6	-0.2	4.8	5.0	4.8	5.5	3.4

*Base annual salary on March 1 of the year (in thousands of dollars)

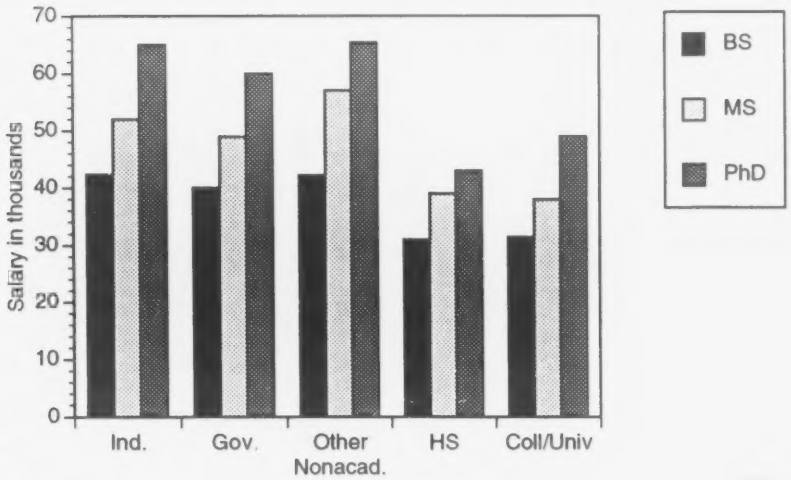
Source: ACS Salary Surveys

Salaries and Employer Type

Chemists' salaries tend to be highest in private industry and lowest in high schools. Although academic salaries have always been lower than those in industry or government, they have, in the past decade, increased faster than salaries in either industry or government. Salaries of PhD chemists in industry increased on average 7% per year from 1980 to 1992, those in government increased 6%, and those in academe increased 8%. For all employer types, PhD salary increases were highest in the early and later 1980s, and were lowest in the mid 80s. This year, only government salaries increased much above inflation. Industrial and academic salaries rose about as much as inflation. Median salary increases for PhD chemists were 6% for those employed in the government and only 3% for those employed in industry or academe.

Figure 3

Median Salaries of Chemists
By Employer Type, 1992



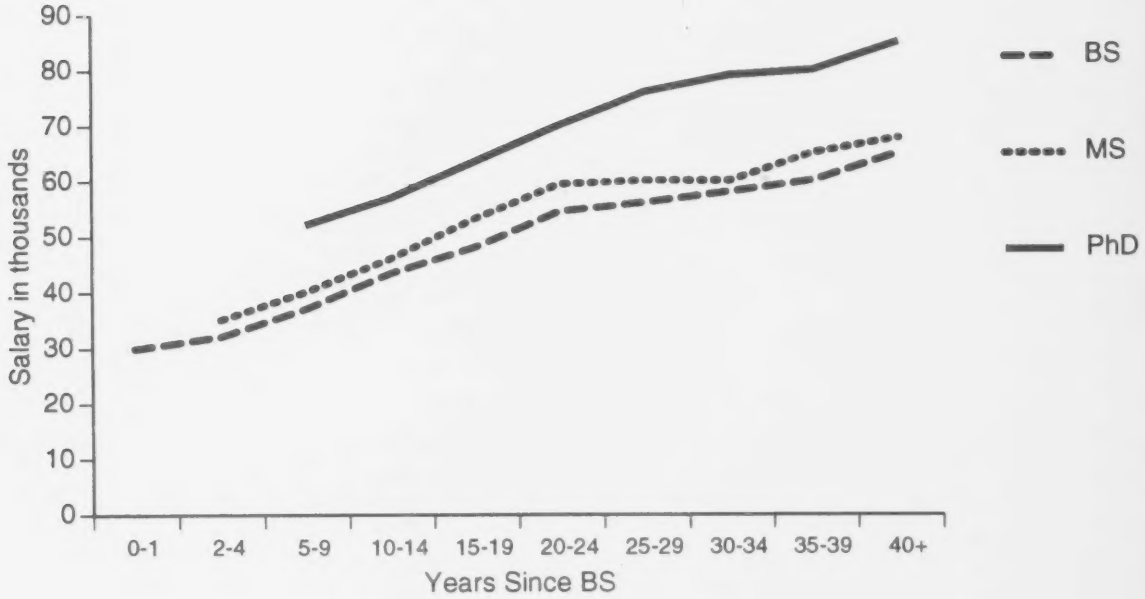
Source: ACS Salary Survey

Nonacademic Salaries

The greatest influences on nonacademic salaries are type of employer, length of experience, and degree of responsibility. Chemists employed in industry generally earn more than those employed in government or the service sector. Salaries also rise with increased experience and responsibility. Other influences on nonacademic salaries are type of industry (for industrial chemists) and work function. Salaries for chemists employed in industry are generally higher for those working in the petroleum industry and for those in management. Employer size also influences nonacademic salaries. Larger employers (those with 2,500 or more employees) generally pay more than smaller employers (those with less than 2,500 employees). The median salary of a BS industrial chemist with 0-1 years of experience in a smaller firm is $26,000 compared to a median of $30,300 for a BS chemist with comparable experience in a larger firm.

Figure 4

Industrial Chemists' Median Salaries
By Degree and Years Since the BS, 1992



Source: ACS Salary Survey

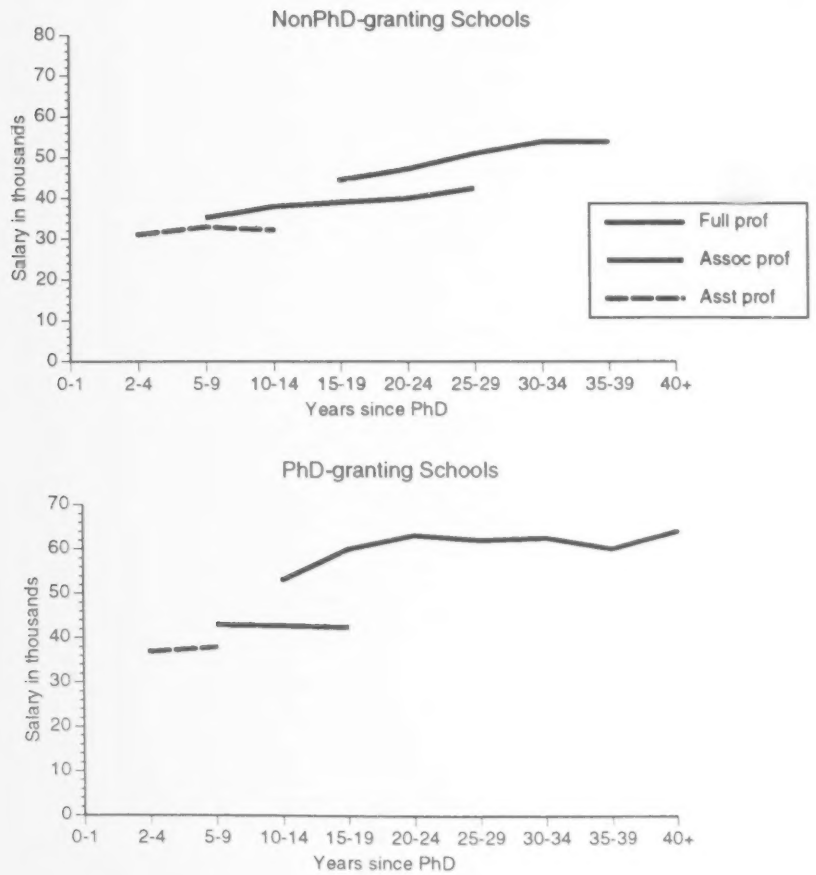
Salaries also differ by geographic region. The median salary of PhDs in industry ranged from a high of $68,000 in the Pacific region to a low of $60,000 in the Mountain region. Regional differences in salaries are largely a function of differences in length of experience and type of industry. Within categories of experience and within industries, salaries are fairly similar across regions. For example, among PhD chemists employed in the pharmaceuticals industry with 10-14 years since the BS, the median salary ranges from $59,200 in the Pacific region to $62,000 in the East North Central region.

Academic Salaries

The greatest influences on academic salaries are academic rank, school type, and work function (e.g., teaching, administration). Academic salaries are generally higher for full professors, those in public institutions, those in departments granting PhD degrees, and those in research as opposed to teaching. Salaries of tenured faculty are somewhat higher than those of nontenured faculty. Within PhD-granting departments, salaries are higher in private schools than in public schools. Within BS-granting departments, salaries are higher in public schools than in private schools. For assistant and associate professors, length of experience has little influence on salaries. The median salary for PhD associate professors with 5-9 years since the PhD and on 9 or 10 month contracts is $40,000; the median salary for those with 25-29 years since the PhD is $43,000.

Figure 5

Median Salaries of PhD Academic Chemists
By Rank and Years Since PhD, 1992
(9/10 Month Salaries)



Source: ACS Salary Survey

Salaries and Gender

Salaries for women chemists are generally lower than those for men. The median salary for women PhDs in industry is 87% of that for men. The difference in men's and women's median salaries is partly due to differences in experience. When length of experience is taken into account, the salary gap narrows. For example, the median salary for women PhDs in industry with 20-24 years since the BS is 93% of that for men with comparable experience. The difference in men's and women's median salaries can also be explained by differences in work function and responsibility, e.g., men are more likely than women to be in management.

Among academic chemists, the difference in men's and women's median salaries is partly due to differences in rank and partly due to differences in type of school. Women chemists in academia are less likely than men chemists to be full professors and are less likely than men chemists to be employed in PhD-granting schools. The median salaries of men and women chemists with comparable rank and type of school are more nearly equal. For example, the median salary of PhD women full professors on 9 or 10 month contracts in PhD-granting schools is 93% of that for comparable men. Salaries for women assistant and associate professors on 9/10 month contracts in PhD-granting schools are slightly higher than those for comparable men.

A more complete analysis of the salaries, employment status, and demographic characteristics of women chemists can be found in the ACS report *Women Chemists 1990*. Further information on women in chemistry degree programs, in graduate education, and in employment can be found in the May 1991 *Workforce Report* "A Manly Profession: Women in Chemistry."

Employment and Unemployment

Unemployment went up dramatically this year for both chemists and chemical engineers. The unemployment rate for chemical engineers was 2.8% this year, which is more than double last year's 1.3%. The unemployment rate for chemists is 1.9% this year, compared to 1.6% last year. Unemployment among chemists and chemical engineers has not been this high since 1983. Figure 6 shows the long range trends in unemployment for chemists and chemical engineers.

Length of unemployment also increased this year. Of those who were unemployed at the time of the survey, more than one quarter (27%) had been unemployed for more than one year. Last year, only 22% had been unemployed that long. Almost half (47%) of those who were unemployed at the time of the survey had been unemployed for more than six months, compared to only 42% last year.

Four percent of chemists in the labor force at the time of the survey had been unemployed at some time during 1991, compared with only 3% during 1990.

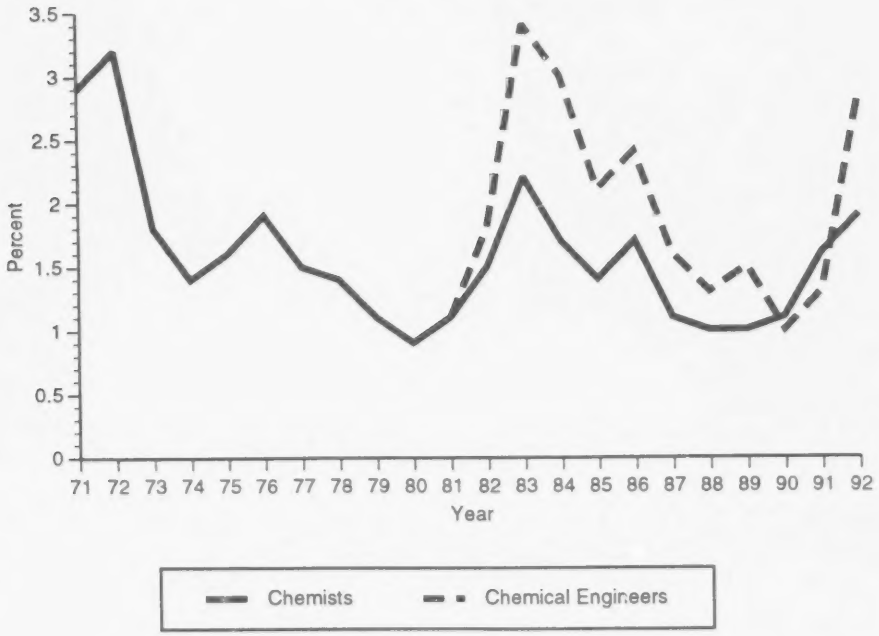
Unemployment rates were higher for BS and MS chemists, for women, for industrial and "other nonacademic" chemists, and for either younger or older chemists (i.e., those less than 40 years old or those 50 or more). BS and MS chemists had higher unemployment rates this year (2.6% and 2.5%, respectively) than PhD chemists (1.1%). Chemists in "other nonacademic" employment (e.g., hospitals, nonprofits) had a higher rate of unemployment (3.7%) than chemists in any other type of employment: 2.1% for industrial chemists, 1.3% for academic chemists, and .9% for government chemists. By region, unemployment rates

for chemists were far lower in the Middle Atlantic and East North Central regions than elsewhere. Figure 7 presents unemployment rates by region.

Further information about this survey may be obtained from Joan Burrelli (202) 872-4433.

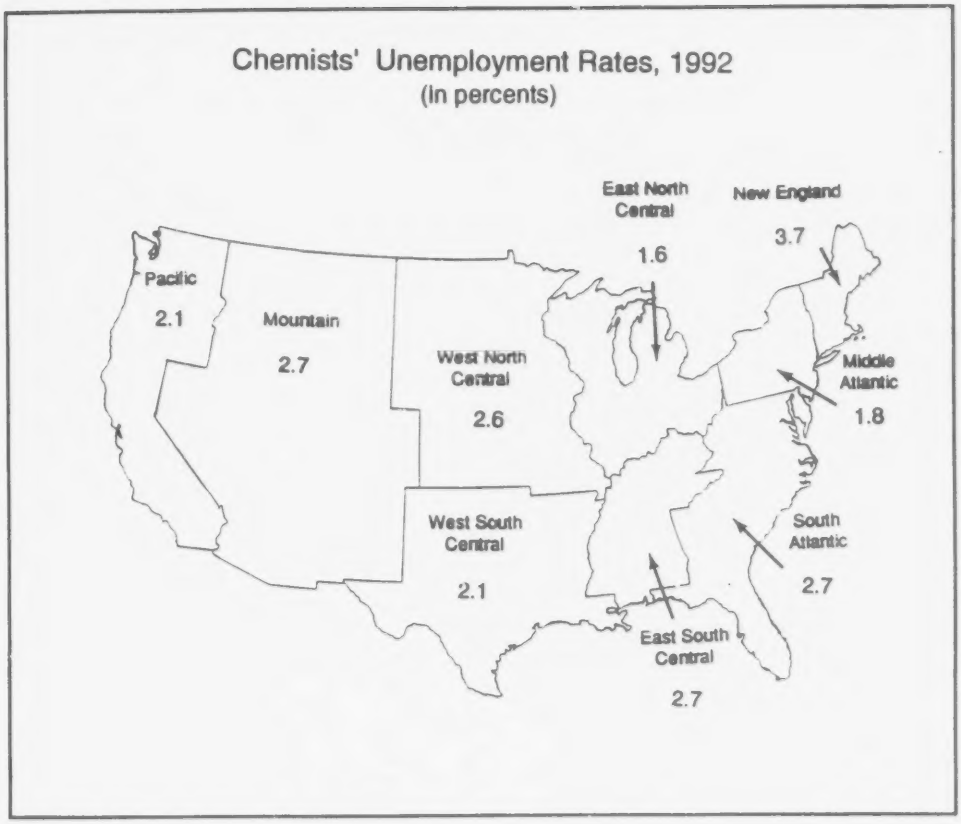
Figure 6

Unemployment Rates of Chemists and Chemical Engineers, 1971-1992



Source: ACS Salary Surveys

Figure 7



Source: ACS Salary Surveys

A METHOD FOR ESTIMATING AVERAGE SALARIES

A compact summary of the information in this report is possible through a statistical technique known as multiple regression. This technique identifies which characteristics have the greatest effect on salaries, and results in a formula for estimating the average salary of respondents with certain characteristics.

For industrial chemists and chemical engineers responding to the 1992 survey, the characteristics that account for most of the variation among salaries are highest degree, experience (years since the BS), and either work function or number of subordinates. Chemical engineers salaries are influenced by whether one is in general management or R&D management. Chemists' salaries are influenced more by the number of subordinates. For chemists, an additional factor that influences salaries is size of employer. Chemists work for small or large employers whereas chemical engineers generally work for larger employers.

Table I displays the factors needed to estimate the average salary for any group of respondents who are industrial chemists with any combination of the listed characteristics.

For example, to estimate the average salary in March 1992 for industrial chemists with the doctorate, 15 to 19 years of experience, 3 to 9 subordinates, and working for a large employer, find the corresponding factors in Table I and multiply them together with the base salary for all industrial chemists:

($24,916) x (1.292) x (1.683) x (1.140) x (1.109) = $68,495

Table II displays the factors needed to estimate the average salary for chemical engineers. For example, to estimate the average salary in March 1992 for industrial chemical engineers with a bachelor's degree, 15 to 19 years of experience, and working in R&D management, find the corresponding factors in Table II and multiply them together with the base salary for all industrial chemical engineers:

($37,977) x (1.000) x (1.465) x (1.301) = $72,383

For academic chemists responding to the 1992 survey, the characteristics that account for most of the variation among salaries are rank, academic work function, length of contract (9 or 10 month or 11 or 12 month), and the highest degree offered by the respondent's department.

Table III displays the factors needed to estimate the average salary for any group of respondents who are PhD academic chemists employed full-time in colleges or universities with any combination of the listed characteristics.

For example, to estimate the average salary in March 1992 for academic chemists at the rank of full professor, engaged primarily in research, on 11 or 12 month contracts, and employed in PhD-granting departments, find the corresponding factors in Table III and multiply them together with the base salary for all academic chemists:

($31,291) x (1.690) x (1.129) x (1.305) x (1.126) = $87,730

Averages estimated using this method should be interpreted with caution, for two reasons. First, and more important, is that the relationship between salary and employment characteristics is not exact. Variations due to employer (such as size of company and geographic location), or to individual differences (such as ability and number of people supervised), and other characteristics prohibit perfect estimation of an individual's salary. Secondly, the factors shown in the tables are estimates derived from a sample of chemists rather than the entire population of chemists, and as such are subject to the imprecision associated with sampling procedures.

Table I

SALARY FACTORS FOR INDUSTRIAL CHEMISTS

BASE SALARY	$24,916
DEGREE	
Bachelor's	1.000
Master's	1.067
Doctorate	1.292
MATURITY: (Years Since Receiving BS)	
0-1	1.000
2-4	1.138
5-9	1.343
10-14	1.521
15-19	1.683
20-24	1.828
25-29	1.925
30-34	1.985
35-39	2.066
40 or more	2.132
TOTAL SUBORDINATES	
None	1.000
1-2	1.065
3-9	1.140
10-49	1.302
50 or more	1.709
SIZE OF EMPLOYER	
Less than 2,500	1.000
2,500 or more	1.109

Table II

SALARY FACTORS FOR INDUSTRIAL CHEMICAL ENGINEERS

BASE SALARY:	$37,977
DEGREE:	
Bachelor's or Master's	1.000
Doctorate	1.171
MATURITY: (Years Since Receiving BS)	
0-4	1.000
5-9	1.128
10-14	1.279
15-19	1.465
20-24	1.533
25-29	1.706
30-34	1.845
35-39	1.975
40 or more	1.845
WORK FUNCTION:	
Non-management	1.000
R&D Management	1.301
General Management	1.358

Table III

SALARY FACTORS FOR ACADEMIC CHEMISTS

BASE SALARY:	$31,291
RANK:	
Professor	1.690
Associate Professor	1.230
Assistant Professor	1.000
Non-faculty Research Associate	0.879
WORK FUNCTION:	
Teaching	1.000
Research	1.129
Administration	1.243
LENGTH OF CONTRACT:	
9 or 10 month	1.000
11 or 12 month	1.305
HIGHEST DEGREE OFFERED IN DEPARTMENT:	
Bachelor's or Master's	1.000
Doctorate	1.126

LIST OF TABLES

SALARIES ON MARCH 1, 1992

	Table Number	Page
ALL CHEMISTS		
Type of Employer . . . . . Years since the BS:		
Bachelors	1.1.1	25
Masters	1.1.2	26
Doctorate	1.1.3	27
INDUSTRIAL CHEMISTS		
Highest Degree . . . . . Years since the BS:	2.1.1	28
Men	2.1.2	29
Women	2.1.3	30
Bachelor's Degree Holders:		
Years since the BS and:		
Work Specialty	2.2.1	31
Work Function	2.2.2	33
Type of Industry	2.2.3	35
Geographic Region	2.2.4	37
Supervisory Status	2.2.5	39
Total Subordinates	2.2.6	40
Size of Employer	2.2.7	41
Master's Degree Holders:		
Years since the BS and:		
Work Specialty	2.3.1	42
Work Function	2.3.2	44
Type of Industry	2.3.3	45
Geographic Region	2.3.4	47
Supervisory Status	2.3.5	48
Total Subordinates	2.3.6	49
Size of Employer	2.3.7	50
Doctorate Degree Holders:		
Years since the BS and:		
Work Specialty	2.4.1	51
Work Function	2.4.2	53
Type of Industry	2.4.3	55
Geographic Region	2.4.4	58
Supervisory Status	2.4.5	60
Total Subordinates	2.4.6	61
Size of Employer	2.4.7	63

		Table Number	Page
GOVERNMENTAL CHEMISTS			
Highest Degree	Years since the BS	3.1.1	64
PhD ACADEMIC CHEMISTS in COLLEGES or UNIVERSITIES			
Academic Rank and Contract Status		4.1.1	65
Academic Rank and:			
Years since the PhD	9 or 10 Month Contract	4.2.1	66
	11 or 12 Month Contract	4.2.2	67
Academic Work Function	9 or 10 Month Contract	4.3.1	68
	11 or 12 Month Contract	4.3.2	69
Work Specialty	9 or 10 Month Contract	4.4.1	70
	11 or 12 Month Contract	4.4.2	71
Tenure	9 or 10 Month Contract	4.5.1	72
	11 or 12 Month Contract	4.5.2	73
Institutional Control	9 or 10 Month Contract	4.6.1	74
	11 or 12 Month Contract	4.6.2	75
Type of Institution	9 or 10 Month Contract	4.7.1	76
	11 or 12 Month Contract	4.7.2	77
Institutional Control and Type of Institution	9 or 10 Month Contract	4.8.1	78
	11 or 12 Month Contract	4.8.2	79
Sex	9 or 10 Month Contract	4.9.1	80
	11 or 12 Month Contract	4.9.2	81
Geographic Region	9 or 10 Month Contract	4.10.1	82
	11 or 12 Month Contract	4.10.2	83

	Table Number	Page
STIPENDS OF POSTDOCTORAL FELLOWS		
Institutional Control and Work Field	5.1.1	84
INDUSTRIAL CHEMICAL ENGINEERS		
Highest Degree and Years since the BS	6.1.1	85
EMPLOYMENT AND UNEMPLOYMENT ON MARCH 1, 1992		
ALL RESPONDENTS		
Employment Status by:		
Work Specialty	7.1.1	86
Employer Type	7.1.2	88
CHEMISTS		
Employment Status by:		
Highest Degree	8.1.1	89
Men	8.1.2	90
Women	8.1.3	91
Age	8.2.1	92
Race/Ethnicity	8.3.1	94
Citizenship	8.4.1	95
Type of Employer	8.5.1	96
Industrial	8.5.2	97
Academic	8.5.3	100
Non-academic Work Function	8.6.1	101
Work Specialty	8.7.1	103
Geographic Region	8.8.1	105

	Table Number	Page
UNEMPLOYED CHEMISTS		
Length of Unemployment by: Highest Degree	9.1.1	106
DEMOGRAPHIC CHARACTERISTICS		
ALL RESPONDENTS		
Highest Degree and:		
Sex	10.1.1	107
Age	10.2.1	108
Men	10.2.2	109
Women	10.2.3	110
Work specialty	10.3.1	111
Race/Ethnicity	10.4.1	113
Race/Ethnicity and:		
Sex	10.5.1	114
Citizenship	10.6.1	115
Geographic Regions and:		
Age	10.7.1	116
Non-academic Work Function	10.8.1	118
Work Specialty	10.9.1	120
Sex	10.10.1	123
Highest Degree	10.11.1	124

TECHNICAL NOTES

The target population of the 1992 Salary and Employment Status Survey was those ACS members who had U.S. mailing addresses, were not older than 70, and had neither student, retired, nor emeritus status. On January 31, 1992, the ACS membership totalled 136,792, of which approximately 89,000 met the above criteria for inclusion in the survey. The survey questionnaires were mailed to 17,000 of these members by bulk mail on February 27. By the May 8 cut-off date, 12,011 (60%) usable questionnaires had been returned. A follow-up mailing to nonresponders was sent first class on March 30.

Definitions

For the purposes of the survey analysis only, the following definitions were used:

Chemist:	A respondent who indicated a work specialty of chemistry or biochemistry (categories 2 through 15 of Part I, Question 3 on the questionnaire) or a non-chemistry work specialty (categories 16 through 19) and a degree field of chemistry or biochemistry.
Chemical engineer:	A respondent who indicated a work specialty of chemical engineering or a degree field of chemical engineering (category 1 of Part I, Question 3 on the questionnaire).
Unemployed:	A respondent who is unemployed and seeking employment (category 4 of Part I, Question 4 on the questionnaire).

This report represents the respondents' principal annual salaries as of March 1, 1992. The respondent's age is given as of March 1, 1992. A respondent's geographic region refers to place of employment. A list of geographic regions and their member states is on page 24 of this report.

Proportions

The proportion of people falling within a certain cell in one of the tables is a sample proportion. The sample proportion is used to make statements about the corresponding population proportion, but, of course, the sample proportion generally is not exactly equal to the population proportion. A useful estimate of the representativeness of the sample proportion is the confidence interval. Such an interval estimate is illustrated in the following statement: "We assert with 95% confidence that the population proportion is between 0.04 and 0.06." A simple but adequate formula for a confidence interval centered on the sample proportion is

$$p\ (\text{lower}) = \hat{p} - Z\sqrt{[\hat{p}(1-\hat{p})/n]}$$

$$\text{and } p\ (\text{upper}) = \hat{p} + Z\sqrt{[\hat{p}(1-\hat{p})/n]}$$

where p (lower) = lower boundary of the interval
p(upper) = upper boundary of the interval
$\hat{p}$ = the sample proportion
Z = a function of the level of confidence and is found in a table of the standard normal distribution.
n = the sample size

Inspection of the formula shows that the width of the confidence interval is inversely proportional to the square root of the sample size, so that proportions derived from small samples are not as precise as ones drawn from large samples. Also, if non-respondents differ from respondents with regard to the characteristics under consideration, the formula will overstate precision because the formula is based on assumption of 100% response.

Suppose a confidence interval is required for a group containing 1900 sample members. If the sample contains 95 persons with a specific characteristic, then the numbers that go into the formula are p=95/1900= 0.05 and n=1900. For a 95% confidence interval, Z is about 2. Putting these numbers into the formula above we have:

$$p(\text{lower}) = \hat{p} - Z\sqrt{[(1-\hat{p})/n]}$$

$$= 0.05 - 2\sqrt{[0.05(0.95)/1900]}$$
$$= 0.05 - 0.01$$
$$= 0.04$$

$$\text{and similarly, } p\ (\text{upper}) = 0.05 + 0.01$$
$$= 0.06$$

Thus, a 95% confidence interval for p is from 4.0% to 6.0%. Although we cannot say that the population proportion is exactly 5.0%, we can be confident that it is between 4.0% and 6.0%. The 95% level of confidence means roughly that if this procedure were followed a large number of times using different samples of the same size, the population proportion would be within the calculated interval about 95% of the time.

Means

As with proportions, confidence intervals may be constructed around the mean. The formula for a confidence interval around the sample mean is:

$$\bar{X} \pm Z\, s/\sqrt{n}$$

where $\bar{X}$ = the sample mean
Z = a function of the level of confidence and is found in a table of the standard normal distribution
s = the sample standard deviation
n = the sample size

For example, in Table 1.1.1, the mean salary for a BS chemist who has 2-4 years experience and is employed in industry is $32,007, the standard deviation is $6,246 and the count is 245. For a 95% confidence interval, Z is about 2. Putting these numbers into the formula above, we have:

$$\$32{,}007 \pm 2\ (\$6246)/\sqrt{245}$$
$$\text{or } \$32{,}007 \pm \$798$$

Thus, a 95% confidence interval for the mean is $31,209 to $32,805. The size of the confidence interval depends on the number of respondents and the standard deviation. A smaller count or a larger standard deviation will result in a larger confidence interval.

Medians

If a sample of size n is arranged in ascending order of magnitude, the median Md is given by the $(n+1)/2$th value. If $(n+1)/2$ is not an integer, then the median is a weighted average of the two values whose ranks are closest to $(n+1)/2$.

The median (the score that cuts the distribution in half) is generally a better measure of central tendency in salary distributions than the mean (the statistical average). Means are more likely than medians to be influenced by extremely high scores, which are typical in salary distributions.

The difference between the first quartile (the score below which one quarter of the case lie) and the third quartile (the score below which three quarters of the cases lie) is known as the interquartile range and is a measure of the variability in the distributions.

If the number of responses in a cell of a salary table is small, then the sample salary statistics for that cell may not accurately estimate the corresponding population salary statistics. In general, a cell containing fewer than 15 responses does not provide a useful estimate of the median salary, and a cell containing fewer than 25 responses does not provide a useful estimate of the 25th or the 75th salary percentile. For this reason, cells containing fewer than 15 responses were suppressed in the tables in this book.

GEOGRAPHIC REGIONS

PACIFIC

Alaska
California
Hawaii
Oregon
Washington

MOUNTAIN

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

WEST NORTH CENTRAL

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

WEST SOUTH CENTRAL

Arkansas
Louisiana
Oklahoma
Texas

EAST NORTH CENTRAL

Illinois
Indiana
Michigan
Ohio
Wisconsin

EAST SOUTH CENTRAL

Alabama
Kentucky
Mississippi
Tennessee

MIDDLE ATLANTIC

New Jersey
New York
Pennsylvania

SOUTH ATLANTIC

Delaware
District of Columbia
Florida
Georgia
Maryland
North Carolina
South Carolina
Virginia
West Virginia

NEW ENGLAND

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Discrepancies Among Tables

Some pairs of tables contain totals that should be identical but are not. For example, two tables that represent information about PhD respondents should show the same total number of PhDs. They might, however, show different totals. To illustrate, if one table groups the PhDs according to specialty and other groups them according to geographic region, the totals will differ unless the number who did not indicate their specialty is the same as the number who did not indicate their geographic region.

Comparing Salaries

Often questions arise concerning B.S. chemists' salaries as compared with M.S. chemists', or women's salaries as compared with men's. These and similar comparisons require caution.

Statistical tests should be performed to determine whether observed differences in salaries of various sample groups could be mere chance occurrences resulting from peculiarities of the sample. Whether a difference in salaries is "statistically significant" depends not only on the magnitude of the difference but also on the sample size and the magnitude of the sample standard deviations.

Discussion of statistical tests of significance can be found in *Introductory Statistics for Business and Economics* by Thomas H. Wonnacott and Ronald J. Wonnacott, N.Y.: Wiley, 1990; and other similar texts.

Nonresponse Bias

The confidence intervals discussed earlier can estimate the amount of variability due to sampling error. Another source of error may be response bias. Members who did respond may be different from those who did not respond. The likelihood and extent of nonresponse bias is small. Comparisons between the survey responses and the ACS membership records show no bias in terms of age, sex, employer, or geographic region. In addition, a telephone follow-up of 388 nonresponders to last year's survey found that nonresponders' salaries were virtually the same as those of responders. The mean salary for responders was $47,007; for nonresponders it was $57,982. A t-test of the difference between the mean salaries of the two groups resulted in no significant difference between the means. (Student's t was only 0.57). The percent of both groups who were unemployed was also the same--1.6%.

Comparison of Survey Results and Membership Characteristics

	Salary Survey	Year-end 1991 Membership Records
Sex		
Male	80.9%	81.6%
Female	19.1	18.4
Age		
20 - 29	9.0	8.7
30 - 39	32.0	31.6
40 - 49	27.9	28.4
50 - 59	21.3	21.0
60+	9.9	10.2
Employer		
Industrial	62.5	59.4
Government	7.5	7.9
Other	5.7	7.1
Academic	24.2	25.6
Region		
Pacific	12.3	12.5
Mountain	4.2	4.0
West North Central	6.2	5.9
West South Central	7.7	7.7
East North Central	19.5	19.0
East South Central	3.9	3.6
Middle Atlantic	22.4	23.6
South Atlantic	16.7	16.3
New England	7.1	7.5

Note: Both survey results and membership characteristics refer to full and associate members who are less than 71 years old and who are living in the U.S.

Table 1.1.1

SALARIES of BS CHEMISTS employed FULL-TIME
by EMPLOYER TYPE and YEARS SINCE BS
1992 ACS Salary Survey

TYPE OF EMPLOYER & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Industry						
Total	1955	47,367	20,432	35,000	42,400	55,000
0-1	39	28,012	6,526	22,300	29,900	32,000
2-4	245	32,007	6,246	27,800	32,000	35,199
5-9	439	38,004	9,582	32,000	37,008	42,000
10-14	375	44,325	13,073	37,000	42,300	49,400
15-19	270	50,806	17,084	41,000	48,000	57,500
20-24	182	57,178	16,767	45,000	54,500	65,000
25-29	150	59,794	19,846	46,500	56,000	70,000
30-34	118	61,248	21,418	48,641	58,000	72,000
35-39	80	69,983	33,037	50,000	60,000	80,000
40 or more	57	77,959	41,667	54,000	65,000	85,000
Government						
Total	179	42,477	12,817	33,000	40,000	50,000
5-9	26	33,097	7,422	30,432	32,800	37,388
10-14	32	37,341	8,036	31,700	36,498	43,373
15-19	31	41,469	10,852	35,556	39,800	49,290
20-24	26	44,539	10,226	37,680	42,000	50,000
25-29	22	55,673	11,773	48,700	54,680	64,800
30-34	18	49,677	15,002	38,400	50,250	58,500
Other Nonacademic						
Total	103	52,918	34,711	32,500	42,250	60,000
15-19	15	52,326	40,888	40,000	41,246	46,000
25-29	17	57,510	22,983	42,000	60,000	67,200
30-34	15	56,893	17,375	45,000	55,000	72,000
High School						
Total	20	32,692	9,061	25,595	30,944	39,020
College or Univ						
Total	63	35,261	14,655	24,700	31,428	45,600

Note: Cells with fewer than 15 cases have been suppressed.

Table 1.1.2

SALARIES of MS CHEMISTS employed FULL-TIME
by EMPLOYER TYPE and YEARS SINCE BS
1992 ACS Salary Survey

TYPE OF EMPLOYER & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Industry						
Total	1199	55,436	18,994	43,000	52,000	64,000
2-4	26	33,738	5,583	30,300	35,000	37,000
5-9	168	40,855	6,544	36,100	40,000	44,910
10-14	225	48,872	12,784	41,000	46,000	55,000
15-19	236	55,732	14,096	46,100	53,200	62,000
20-24	198	60,976	17,956	49,000	59,370	68,000
25-29	135	62,704	18,557	50,000	60,000	70,000
30-34	94	61,692	19,901	48,300	59,900	67,000
35-39	73	71,787	33,312	53,000	65,000	83,000
40 or more	44	68,192	17,611	55,000	67,750	79,702
Government						
Total	151	49,197	13,539	40,000	49,000	56,990
5-9	16	34,645	5,907	29,525	35,250	38,360
10-14	20	42,773	9,800	34,250	42,213	48,145
15-19	26	47,834	10,524	40,000	48,000	54,602
20-24	28	49,176	8,348	44,335	48,258	53,000
25-29	22	58,641	12,185	52,370	59,169	69,000
30-34	19	57,313	11,595	51,000	55,450	62,234
Other Nonacademic						
Total	75	60,150	29,194	40,000	57,000	70,000
20-24	19	51,311	16,880	35,000	49,000	70,000
High School						
Total	73	39,722	11,388	31,000	39,000	46,000
25-29	15	41,759	10,851	33,000	38,000	48,888
30-34	18	43,506	12,998	36,000	43,500	50,300
College or Univ						
Total	149	39,237	13,057	29,000	37,920	48,000
5-9	15	27,101	4,099	24,800	27,085	30,100
10-14	17	32,730	8,381	26,000	33,202	38,000
20-24	23	35,162	10,003	27,000	32,000	43,000
25-29	21	44,823	17,681	35,000	38,500	50,500
30-34	27	41,838	9,924	33,000	41,650	48,390
35-39	23	49,546	11,521	41,800	52,500	58,627

Note: Cells with fewer than 15 cases have been suppressed.

Table 1.1.3

SALARIES of PhD CHEMISTS employed FULL-TIME
by EMPLOYER TYPE and YEARS SINCE BS
1992 ACS Salary Survey

TYPE OF EMPLOYER & YEARS SINCE BS	Count	Mean	Std. Dev	25th %-ile	50th %-ile	75th %-ile
Industry						
Total	3088	71,166	27,097	56,000	65,000	80,000
5-9	281	51,261	6,934	48,128	52,000	55,000
10-14	601	57,944	11,530	52,000	56,880	62,000
15-19	544	65,098	13,038	58,000	63,475	71,995
20-24	511	72,987	18,670	60,250	70,000	81,400
25-29	469	80,639	22,690	66,800	76,000	91,500
30-34	323	86,574	34,212	67,000	79,000	96,000
35-39	243	88,448	50,773	67,000	80,000	96,000
40 or more	115	91,197	40,379	67,500	85,000	103000
Government						
Total	415	61,678	16,212	50,516	60,000	71,951
5-9	21	46,662	8,755	38,861	46,000	52,740
10-14	46	48,299	10,537	39,528	49,500	55,000
15-19	59	52,699	10,594	46,836	52,000	60,067
20-24	54	61,763	17,234	50,000	60,000	72,000
25-29	114	64,318	13,863	54,000	62,255	74,000
30-34	58	68,573	12,757	60,070	68,000	77,079
35-39	38	74,486	18,666	63,000	76,573	83,502
40 or more	25	72,410	15,482	63,000	70,500	83,000
Other Nonacademic						
Total	221	71,238	37,300	50,000	65,400	85,000
10-14	16	47,461	11,429	42,500	49,890	54,000
15-19	33	56,774	18,195	46,200	60,000	66,000
20-24	24	63,967	21,351	47,500	60,650	71,500
25-29	45	78,883	42,802	55,000	68,555	100000
30-34	39	76,078	24,953	60,269	75,000	89,300
35-39	29	82,556	64,186	50,000	80,000	94,000
40 or more	28	84,053	31,848	65,772	83,440	92,500
High School						
Total	20	43,358	11,408	34,000	43,050	51,000
College or Univ						
Total	1925	53,882	22,834	38,000	49,000	62,500
5-9	80	32,971	7,241	28,281	33,000	37,000
10-14	243	38,343	11,901	32,000	36,500	42,000
15-19	241	44,201	14,471	35,000	41,500	51,000
20-24	244	50,225	17,493	37,300	46,100	60,000
25-29	344	58,662	23,139	42,000	52,000	68,000
30-34	344	60,321	21,348	46,558	55,723	71,500
35-39	225	61,369	23,513	47,000	57,250	70,000
40 or more	204	69,225	29,279	50,000	60,980	84,949

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.1.1

SALARIES of INDUSTRIAL CHEMISTS employed FULL-TIME
by DEGREE and YEARS SINCE BS
1992 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Total	1955	47,367	20,432	35,000	42,400	55,000
0-1	39	28,012	6,526	22,300	29,900	32,000
2-4	245	32,007	6,246	27,800	32,000	35,199
5-9	439	38,004	9,582	32,000	37,008	42,000
10-14	375	44,325	13,073	37,000	42,300	49,400
15-19	270	50,806	17,084	41,000	48,000	57,500
20-24	182	57,178	16,767	45,000	54,500	65,000
25-29	150	59,794	19,846	46,500	56,000	70,000
30-34	118	61,248	21,418	48,641	58,000	72,000
35-39	80	69,983	33,037	50,000	60,000	80,000
40 or more	57	77,959	41,667	54,000	65,000	85,000
MS						
Total	1199	55,436	18,994	43,000	52,000	64,000
2-4	26	33,738	5,583	30,300	35,000	37,000
5-9	168	40,855	6,544	36,100	40,000	44,910
10-14	225	48,872	12,784	41,000	46,000	55,000
15-19	236	55,732	14,096	46,100	53,200	62,000
20-24	198	60,976	17,956	49,000	59,370	68,000
25-29	135	62,704	18,557	50,000	60,000	70,000
30-34	94	61,692	19,901	48,300	59,900	67,000
35-39	73	71,787	33,312	53,000	65,000	83,000
40 or more	44	68,192	17,611	55,000	67,750	79,702
PhD						
Total	3088	71,166	27,097	56,000	65,000	80,000
5-9	281	51,261	6,934	48,128	52,000	55,000
10-14	601	57,944	11,530	52,000	56,880	62,000
15-19	544	65,098	13,038	58,000	63,475	71,995
20-24	511	72,987	18,670	60,250	70,000	81,400
25-29	469	80,639	22,690	66,800	76,000	91,500
30-34	323	86,574	34,212	67,000	79,000	96,000
35-39	243	88,448	50,773	67,000	80,000	96,000
40 or more	115	91,197	40,379	67,500	85,000	103,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.1.2

SALARIES of MEN CHEMISTS employed FULL-TIME in INDUSTRY
by DEGREE and YEARS SINCE BS
1992 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Total	1400	50,569	22,146	37,000	45,723	58,000
0-1	22	30,579	5,879	27,480	30,900	32,400
2-4	135	31,436	6,487	27,000	31,700	35,000
5-9	269	38,726	10,386	32,500	38,200	43,000
10-14	250	46,346	13,667	38,500	43,550	50,880
15-19	223	51,823	17,981	41,080	48,430	59,500
20-24	152	59,207	17,138	48,282	56,400	67,500
25-29	123	61,859	20,317	47,500	57,800	73,000
30-34	100	63,018	21,813	50,000	59,050	72,900
35-39	71	71,435	33,080	52,000	63,000	80,000
40 or more	55	78,880	42,138	54,000	65,400	90,000
MS						
Total	941	57,278	18,712	44,880	54,000	66,000
5-9	101	40,864	6,333	36,500	40,000	45,000
10-14	173	50,100	13,438	42,000	46,800	56,000
15-19	188	56,310	14,203	46,950	53,970	63,500
20-24	168	61,993	18,074	49,150	59,700	69,524
25-29	114	63,934	19,350	50,000	60,500	74,172
30-34	75	63,491	20,123	51,720	60,000	72,000
35-39	68	69,751	26,260	51,625	65,500	82,850
40 or more	42	68,878	17,633	55,000	68,750	80,000
PhD						
Total	2766	72,415	27,945	56,900	67,000	81,000
5-9	214	51,496	7,278	48,600	52,000	55,000
10-14	514	58,196	11,421	52,100	57,000	62,500
15-19	470	65,273	13,245	58,000	63,460	72,000
20-24	464	73,435	18,809	60,850	70,250	82,090
25-29	446	81,128	22,828	67,600	76,750	92,000
30-34	310	87,594	34,476	68,472	80,000	96,000
35-39	236	89,294	51,266	68,000	80,000	96,000
40 or more	111	91,416	40,826	67,500	85,000	103,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.1.3

SALARIES of WOMEN CHEMISTS employed FULL-TIME in INDUSTRY
by DEGREE and YEARS SINCE BS
1992 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Total	552	39,271	11,898	32,000	37,000	43,900
0-1	16	24,888	6,050	20,550	23,826	29,950
2-4	110	32,707	5,891	29,000	32,450	36,000
5-9	169	36,842	8,066	32,000	36,000	40,560
10-14	125	40,283	10,754	34,000	39,520	45,000
15-19	47	45,982	10,847	37,200	46,000	54,360
20-24	29	46,236	9,179	39,800	44,000	52,208
25-29	27	50,390	14,435	40,000	48,000	60,000
30-34	18	51,414	16,295	37,000	50,000	68,000
MS						
Total	255	48,737	18,619	38,125	45,000	56,000
5-9	67	40,843	6,897	36,000	40,000	43,000
10-14	50	44,904	9,472	39,000	43,500	48,600
15-19	47	53,372	13,702	43,500	52,668	58,800
20-24	30	55,283	16,420	45,000	55,912	63,100
25-29	21	56,028	11,674	49,500	56,000	65,000
30-34	19	54,589	17,743	43,500	50,000	62,000
PhD						
Total	320	60,462	14,372	51,304	58,000	67,250
5-9	67	50,511	5,682	47,700	51,480	54,000
10-14	85	56,467	12,220	51,128	55,620	60,000
15-19	74	63,989	11,662	58,000	63,725	69,250
20-24	47	68,572	16,788	57,797	65,000	78,600
25-29	23	71,161	17,674	58,000	70,000	86,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.1

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK SPECIALTY and YEARS SINCE BS
1992 ACS Salary Survey

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Total	59	45,647	24,084	34,000	40,000	50,000
5-9	18	41,111	10,247	35,250	40,000	40,400
General chemistry						
Total	106	46,956	14,538	37,900	42,780	54,600
5-9	20	39,778	8,654	34,426	38,650	42,000
10-14	15	43,397	9,635	37,500	40,000	48,000
15-19	19	55,818	18,837	43,500	52,250	61,200
Agricultural chem						
Total	66	46,555	23,498	32,057	40,650	53,100
10-14	20	37,373	9,364	28,250	36,274	44,300
Analytical chem						
Total	594	42,247	14,762	32,500	39,550	48,330
2-4	88	30,495	4,974	27,000	31,000	33,300
5-9	145	36,260	10,800	30,300	35,500	41,000
10-14	119	41,208	11,162	34,000	40,000	46,800
15-19	78	45,889	10,415	38,000	43,600	52,000
20-24	54	53,316	13,447	44,000	50,500	58,000
25-29	45	56,979	16,575	46,547	53,000	63,700
30-34	27	50,231	14,077	37,000	53,000	58,400
Environmental chem						
Total	271	43,594	17,137	32,000	40,000	51,000
2-4	38	30,193	6,265	26,900	29,300	34,500
5-9	69	36,240	8,252	30,000	35,000	40,000
10-14	67	46,284	16,085	37,600	42,500	52,700
15-19	35	48,377	14,104	39,000	47,920	57,900
20-24	18	54,060	15,218	38,100	51,500	61,000
Inorganic chem						
Total	48	48,940	23,288	36,190	42,500	52,300
Materials science						
Total	73	52,400	19,158	38,925	50,000	60,500
Medicinal-Pharmaceutical						
Total	90	47,461	25,930	35,100	41,000	53,300
2-4	15	32,726	4,069	32,004	34,200	35,000
5-9	27	37,937	6,132	34,200	37,100	41,800
10-14	15	40,711	5,255	38,500	40,926	43,000

Table 2.2.1 (continued)

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Organic chemistry						
Total	169	50,610	22,404	36,250	46,575	58,500
2-4	28	33,989	4,900	30,250	34,750	36,342
5-9	28	39,173	7,224	34,170	40,000	44,000
10-14	30	51,287	19,809	42,789	46,650	53,000
15-19	22	55,368	14,114	47,161	54,336	62,400
20-24	17	66,255	22,281	56,400	61,200	70,000
25-29	15	56,431	17,959	45,000	58,000	68,000
Physical chemistry						
Total	35	49,150	13,500	38,500	46,035	59,000
Polymer chemistry						
Total	205	50,649	19,827	38,000	47,100	58,495
2-4	20	34,113	6,870	28,920	33,028	37,600
5-9	47	40,764	10,797	34,000	39,350	44,000
10-14	34	44,449	8,865	38,000	42,750	48,000
15-19	32	57,718	28,391	46,696	53,200	61,800
20-24	17	57,854	11,170	50,530	58,000	63,500
Other chemical science						
Total	46	46,095	17,469	33,500	42,100	55,000
Business Administration						
Total	36	77,573	30,856	50,000	75,500	102,500
Computer science						
Total	18	54,730	18,320	42,300	48,850	60,000
Other nonchemistry						
Total	87	57,557	29,955	42,000	53,000	65,000
5-9	17	41,191	8,326	36,900	40,000	46,000
10-14	16	47,676	15,241	40,500	48,900	57,450
15-19	16	51,973	11,617	46,906	54,150	56,700

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.2

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1992 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	136	61,794	27,041	43,000	56,925	72,000
5-9	18	38,353	6,119	36,750	38,000	41,000
10-14	20	50,341	10,677	43,300	47,500	58,000
15-19	25	60,216	25,745	50,000	55,500	65,000
20-24	19	71,884	19,471	57,650	70,000	86,000
30-34	16	71,210	24,368	55,000	70,678	74,500
Basic research						
Total	139	40,121	10,342	33,000	38,646	45,000
2-4	32	33,597	4,489	30,000	34,550	36,842
5-9	40	37,525	6,507	33,083	36,279	41,400
10-14	20	41,273	7,217	35,140	39,875	44,850
15-19	15	44,893	9,695	40,000	45,000	48,000
Applied research						
Total	526	44,642	13,288	35,000	42,000	53,000
2-4	74	33,346	5,717	29,400	33,000	36,350
5-9	127	38,262	7,835	33,000	37,450	41,800
10-14	99	43,226	8,768	38,000	42,450	47,000
15-19	73	48,897	8,687	43,808	49,000	55,000
20-24	42	54,915	15,215	44,000	53,236	62,000
25-29	31	55,926	14,766	45,000	53,300	66,300
30-34	38	58,304	15,725	50,000	54,500	70,000
35-39	20	56,551	15,885	50,529	56,650	64,600
General Mgt						
Total	184	66,054	33,809	44,000	56,450	80,400
5-9	23	40,948	12,306	33,900	39,000	45,000
10-14	38	54,643	24,181	38,000	49,440	59,000
15-19	26	64,782	31,175	47,841	56,500	66,600
20-24	25	61,601	19,004	50,000	58,500	61,000
25-29	23	79,773	23,391	62,400	80,400	91,200
30-34	16	76,133	26,890	55,000	67,000	96,000
Marketing						
Total	185	52,262	17,958	40,000	50,000	63,000
5-9	41	40,167	8,772	34,000	40,000	43,740
10-14	36	49,110	14,041	38,875	48,000	58,200
15-19	32	53,171	16,492	42,250	53,500	62,900
20-24	19	62,555	15,960	47,844	65,000	73,500
25-29	15	56,770	14,584	46,000	55,000	65,000

Table 2.2.2 (continued)

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Production						
Total	351	41,085	13,575	32,000	39,300	47,250
2-4	55	30,895	5,996	27,000	31,000	33,800
5-9	77	35,300	8,598	29,200	35,800	40,600
10-14	76	41,043	7,769	35,700	41,075	47,300
15-19	41	44,781	12,352	37,100	42,000	48,000
20-24	31	51,599	11,848	42,500	50,000	57,000
25-29	27	48,370	13,714	40,700	46,773	52,068
35-39	16	59,182	24,757	46,295	53,650	61,700
Health & Safety						
Total	95	48,896	15,340	38,850	47,100	58,000
5-9	21	39,827	8,194	35,500	37,008	43,600
10-14	16	45,402	12,707	39,000	43,500	49,945
Other lab analysis						
Total	196	37,967	13,624	29,900	35,000	43,000
2-4	38	29,518	6,185	25,600	29,300	32,600
5-9	46	34,632	16,166	29,150	33,000	35,000
10-14	41	38,818	9,963	32,000	37,850	43,000
15-19	24	42,314	6,812	37,900	41,540	43,750
Consulting						
Total	62	45,509	18,799	32,000	40,250	54,500
2-4	15	29,465	4,271	26,800	27,800	33,072
5-9	25	42,662	8,932	36,000	42,000	48,685
Other						
Total	92	48,639	26,474	35,099	42,850	56,706
5-9	23	39,151	9,168	31,000	38,400	45,000
10-14	23	41,753	13,445	32,000	42,000	48,000
15-19	17	50,125	12,978	40,000	52,000	57,120

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.3

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by INDUSTRY and YEARS SINCE BS
1992 ACS Salary Survey

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Analytical service lab						
Total	218	40,307	18,193	29,150	35,200	45,000
2-4	32	27,198	5,537	23,793	27,000	31,000
5-9	66	35,291	14,197	28,760	32,945	39,744
10-14	51	43,815	18,677	32,000	40,000	49,000
15-19	28	46,800	16,586	35,000	43,000	59,000
Contract res firm						
Total	38	42,769	18,206	32,000	39,250	45,000
Utility						
Total	44	48,707	14,318	37,675	46,773	59,000
10-14	15	48,439	12,169	37,500	50,400	58,000
Other nonmanuf						
Total	111	48,112	25,363	34,500	42,500	55,000
2-4	23	31,944	7,483	27,500	29,150	35,000
5-9	37	43,525	9,214	35,500	42,000	51,000
10-14	19	44,451	14,291	37,000	43,000	49,890
Aerospace						
Total	35	52,128	23,122	37,000	48,000	62,000
Basic chemicals						
Total	74	48,855	15,523	36,900	45,000	57,120
10-14	15	41,101	7,451	35,000	42,789	43,200
Specialty chems						
Total	239	52,558	24,646	36,708	45,000	62,700
2-4	23	31,436	5,414	27,000	30,000	36,000
5-9	50	37,430	6,126	33,000	38,000	42,050
10-14	41	45,123	11,681	38,000	42,560	50,000
15-19	32	58,779	27,953	46,000	55,000	65,000
20-24	24	58,707	25,918	38,750	51,000	71,500
25-29	25	69,537	26,905	53,000	61,020	80,400
30-34	18	76,542	22,075	67,000	71,556	84,000
Agricultural chems						
Total	53	44,558	18,806	32,057	39,300	50,000
Coatings						
Total	93	49,644	23,288	37,100	42,500	56,000
5-9	23	40,087	11,318	32,100	38,250	40,100
10-14	19	41,790	5,900	38,000	41,750	46,660
Electronics						
Total	43	46,788	12,443	37,280	43,900	56,000
Food						
Total	73	45,247	21,303	32,750	40,050	52,250
10-14	16	37,981	9,849	28,500	36,348	45,000
20-24	18	50,414	15,696	38,000	46,750	66,000

Table 2.2.3 (continued)

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Glass						
Total	19	48,166	15,898	40,000	44,000	57,500
Instruments						
Total	41	50,141	24,402	34,000	43,400	57,000
Medical devices						
Total	48	40,927	12,964	33,500	38,750	45,425
5-9	16	39,082	11,858	32,900	35,800	43,100
Metals						
Total	45	44,530	13,150	36,750	42,000	55,000
Paper						
Total	28	51,306	21,321	39,000	50,000	57,900
Petroleum						
Total	80	53,726	20,948	40,000	48,000	61,200
10-14	16	46,912	10,683	40,000	43,700	51,150
15-19	15	49,791	9,381	47,200	49,340	55,260
25-29	15	73,366	22,328	58,000	71,492	91,200
Pharmaceuticals						
Total	324	45,039	17,738	35,000	41,000	51,000
2-4	61	33,566	3,268	31,700	33,000	35,700
5-9	93	38,985	6,625	36,000	39,850	42,000
10-14	59	45,220	8,380	40,000	43,450	48,500
15-19	34	48,338	11,234	40,000	46,800	54,000
20-24	26	59,911	12,363	51,500	56,750	63,407
25-29	20	54,930	16,539	44,000	51,900	68,500
Plastics						
Total	67	52,677	15,553	40,450	52,000	62,000
Rubber						
Total	51	53,599	16,837	40,000	51,940	65,100
Soaps						
Total	31	43,891	19,756	32,000	40,200	52,000
Other manufactures						
Total	226	47,548	21,994	35,000	43,500	53,000
2-4	30	31,429	7,422	26,000	30,262	34,600
5-9	43	36,535	7,694	30,700	36,000	40,560
10-14	43	46,133	19,286	36,000	43,000	48,000
15-19	31	47,752	10,161	42,000	48,000	54,000
20-24	17	51,998	17,195	40,000	48,930	53,236
25-29	20	56,647	15,525	45,000	55,000	65,300
30-34	16	56,167	15,697	51,000	55,000	66,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.4

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by GEOGRAPHIC REGION and YEARS SINCE BS
1992 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	225	48,485	22,909	35,000	43,100	55,000
2-4	29	30,892	6,092	26,800	31,000	35,000
5-9	53	39,732	15,878	30,000	37,500	44,000
10-14	45	49,139	14,040	40,976	47,800	55,000
15-19	30	45,956	15,904	35,000	42,040	51,000
20-24	28	58,560	15,674	47,452	52,604	71,000
25-29	17	57,088	12,622	46,000	57,000	66,000
Mountain						
Total	79	49,154	21,624	35,000	41,904	57,500
10-14	19	41,119	10,990	36,000	38,400	40,100
15-19	16	45,116	13,012	34,250	47,625	54,500
West North Central						
Total	137	41,758	17,292	32,500	38,500	49,000
2-4	19	29,604	9,545	22,360	27,600	34,812
5-9	32	35,112	7,619	30,390	34,100	39,800
10-14	27	42,556	22,426	32,500	38,000	47,190
15-19	21	46,767	8,930	41,328	45,500	52,000
20-24	15	46,662	10,627	37,800	45,000	57,000
West South Central						
Total	142	49,525	18,403	35,600	46,000	58,000
5-9	24	39,765	11,423	35,000	38,000	43,300
10-14	28	46,338	17,605	38,800	42,000	49,250
15-19	24	58,179	14,749	47,000	54,000	68,000
20-24	15	59,569	14,279	53,000	56,200	62,000
East North Central						
Total	478	46,082	17,463	33,750	42,000	56,000
2-4	68	32,042	5,718	28,300	31,900	35,000
5-9	109	37,325	8,077	31,700	36,400	41,000
10-14	87	43,156	11,396	36,348	42,000	48,400
15-19	75	52,415	17,215	41,000	52,000	59,500
20-24	37	56,879	15,896	44,000	56,000	65,100
25-29	30	61,277	17,212	51,800	57,400	73,400
30-34	31	57,614	19,111	44,900	57,500	70,800
35-39	15	61,793	25,207	49,057	56,000	72,393
40 or more	18	68,223	23,221	54,000	66,361	85,000
East South Central						
Total	90	44,173	14,752	34,000	42,000	49,600
10-14	28	41,461	7,944	36,000	41,575	45,000

Table 2.2.4 (continued)

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Middle Atlantic						
Total	412	50,031	24,765	36,001	43,000	55,250
2-4	62	33,716	6,093	30,500	33,000	38,000
5-9	94	38,926	7,430	34,000	40,000	42,050
10-14	64	45,264	10,283	40,000	43,200	51,000
15-19	51	53,359	24,548	42,000	48,000	55,000
20-24	32	54,903	18,415	41,000	51,624	61,779
25-29	35	60,032	19,939	45,000	57,800	70,000
30-34	27	63,618	18,677	50,000	59,600	71,556
35-39	27	80,375	30,816	58,000	72,000	103,000
South Atlantic						
Total	269	47,409	17,310	36,000	44,000	55,000
2-4	23	32,008	6,267	27,000	33,600	35,200
5-9	62	37,089	7,528	32,000	36,600	41,200
10-14	61	44,455	10,821	37,850	44,000	50,880
15-19	26	51,099	11,693	43,000	51,961	62,400
20-24	28	57,761	10,623	49,816	57,500	63,500
25-29	29	58,193	22,830	46,000	53,300	61,000
New England						
Total	121	46,101	19,859	32,666	40,000	52,000
2-4	22	30,950	5,382	27,000	31,000	34,600
5-9	39	39,598	10,178	32,666	38,900	43,600
10-14	17	41,827	14,619	35,700	40,000	46,800

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.5

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1992 ACS Salary Survey

SUPERVISORY STATUS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Nonsupervisory						
Total	803	40,397	12,620	32,000	38,500	46,660
0-1	28	26,653	5,862	21,250	27,700	31,200
2-4	142	31,210	5,903	27,040	31,700	35,000
5-9	201	35,863	6,787	31,000	35,800	40,000
10-14	150	40,858	9,887	35,500	40,500	45,350
15-19	88	44,781	10,485	37,350	43,450	51,500
20-24	62	52,199	14,350	42,000	50,000	62,000
25-29	61	51,760	14,248	42,000	49,750	60,000
30-34	38	48,530	15,905	39,000	49,466	58,000
35-39	22	53,974	17,106	42,000	56,000	64,620
Supervisory						
Total	1178	52,063	23,171	37,500	47,000	60,000
2-4	111	32,985	6,538	28,000	32,600	36,000
5-9	242	39,779	11,095	33,100	39,000	43,950
10-14	228	46,586	14,360	37,850	43,400	52,500
15-19	185	53,719	18,835	43,000	51,481	60,000
20-24	121	59,688	17,382	49,500	57,000	67,000
25-29	93	64,859	21,229	50,000	60,000	78,000
30-34	82	67,057	21,168	53,000	63,000	75,000
35-39	58	76,056	35,615	52,000	65,000	95,000
40 or more	47	84,873	43,276	60,000	67,986	102,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.6

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by TOTAL SUBORDINATES and YEARS SINCE BS
1992 ACS Salary Survey

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	803	40,397	12,620	32,000	38,500	46,660
0-1	28	26,653	5,862	21,250	27,700	31,200
2-4	142	31,210	5,903	27,040	31,700	35,000
5-9	201	35,863	6,787	31,000	35,800	40,000
10-14	150	40,858	9,887	35,500	40,500	45,350
15-19	88	44,781	10,485	37,350	43,450	51,500
20-24	62	52,199	14,350	42,000	50,000	62,000
25-29	61	51,760	14,248	42,000	49,750	60,000
30-34	38	48,530	15,905	39,000	49,466	58,000
35-39	22	53,974	17,106	42,000	56,000	64,620
1-2						
Total	386	45,101	14,193	35,000	42,500	52,000
2-4	54	32,935	5,445	29,700	32,800	35,300
5-9	100	38,830	9,027	33,000	39,006	43,200
10-14	68	44,464	10,187	37,750	43,450	48,800
15-19	55	46,799	9,401	40,000	47,000	54,500
20-24	30	52,395	12,046	44,000	51,624	58,000
25-29	21	53,611	14,899	44,000	53,000	61,000
30-34	27	59,254	15,926	50,000	56,200	70,000
35-39	16	61,131	19,878	48,200	57,150	69,700
3-9						
Total	475	49,729	18,343	37,500	46,696	58,000
2-4	39	33,115	6,916	27,500	33,000	38,180
5-9	89	38,382	8,319	32,700	37,500	43,200
10-14	95	44,456	10,466	37,280	42,000	49,000
15-19	90	54,420	21,063	43,000	52,000	61,000
20-24	44	56,983	15,261	47,965	57,200	61,950
25-29	29	58,703	14,691	50,000	58,000	69,000
30-34	42	66,144	17,112	55,000	62,000	74,000
35-39	21	60,863	15,915	50,000	56,000	69,000
40 or more	19	70,525	27,452	53,200	63,000	82,000
10-14						
Total	97	52,380	20,633	38,000	48,000	60,000
5-9	22	43,975	21,104	34,100	41,000	45,000
10-14	24	47,407	13,417	37,500	42,000	57,500
20-24	16	58,365	14,965	50,000	52,850	61,325
15-29						
Total	114	60,803	28,908	42,000	55,000	66,000
5-9	16	43,097	8,342	39,000	40,375	47,250
10-14	26	51,822	18,964	40,000	51,044	56,200
15-19	18	54,867	9,083	48,000	54,000	65,000
25-29	18	72,065	19,401	59,000	66,000	91,000
30-49						
Total	48	74,009	31,810	47,702	70,500	92,500
50-99						
Total	33	74,467	39,692	43,400	75,000	87,000
100 or more						
Total	25	90,265	47,403	50,880	85,000	125,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.7

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by EMPLOYER SIZE and YEARS SINCE BS
1992 ACS Salary Survey

EMPLOYER SIZE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Less than 2,500						
Total	1132	46,210	22,659	33,000	40,800	52,200
0-1	17	27,096	7,147	21,000	26,000	32,000
2-4	143	30,837	6,750	27,000	30,000	35,000
5-9	269	37,120	10,864	30,300	35,500	41,000
10-14	228	43,080	14,240	35,700	41,230	48,000
15-19	154	48,874	20,468	37,900	45,000	55,000
20-24	105	56,680	18,851	43,000	51,451	65,550
25-29	69	54,680	18,718	41,652	50,000	64,350
30-34	64	60,989	24,606	48,000	54,500	70,000
35-39	44	71,047	38,814	48,200	59,500	80,000
40 or more	39	83,641	48,012	54,000	64,000	107,000
2,500 or more						
Total	833	49,027	16,919	37,000	45,000	57,900
0-1	22	28,719	6,079	24,760	30,300	31,800
2-4	106	33,407	5,221	30,500	33,000	36,000
5-9	168	39,484	6,919	35,000	39,200	43,200
10-14	149	46,311	10,813	39,197	43,500	53,000
15-19	118	53,427	10,874	45,500	54,000	60,000
20-24	78	57,842	13,591	49,632	56,950	65,000
25-29	84	63,838	19,906	51,800	60,000	73,000
30-34	54	61,697	17,253	53,000	60,000	72,900
35-39	35	69,389	24,678	54,000	64,620	82,224
40 or more	19	65,650	18,216	53,000	65,200	72,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.1

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK SPECIALTY and YEARS SINCE BS
1992 ACS Salary Survey

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Total	55	58,496	19,545	43,500	54,000	68,000
10-14	16	51,779	13,283	41,358	50,000	55,000
General chemistry						
Total	26	61,801	23,223	43,000	53,200	83,000
Agricultural chemistry						
Total	39	59,496	16,487	45,000	60,000	72,000
Analytical chem						
Total	322	50,777	13,621	41,000	49,000	58,440
5-9	51	40,373	7,446	35,000	40,000	45,000
10-14	59	45,631	9,346	38,900	45,000	50,000
15-19	73	52,773	11,681	45,000	52,500	60,000
20-24	53	56,277	13,634	47,605	56,000	62,300
25-29	29	52,977	10,944	47,400	52,750	59,700
30-34	21	55,693	14,794	45,600	53,000	65,000
35-39	20	58,680	20,585	44,750	55,000	66,460
Environmental chem						
Total	126	52,475	18,492	40,000	49,992	60,000
5-9	15	40,647	6,920	35,000	40,000	44,000
10-14	22	49,813	9,547	45,000	50,000	57,000
15-19	27	50,787	13,590	42,420	50,046	57,900
20-24	18	56,936	20,032	42,000	51,500	73,000
25-29	18	59,189	17,864	49,992	59,500	67,980
Inorganic chem						
Total	28	58,904	16,617	48,800	61,000	65,600
Materials science						
Total	53	54,156	16,888	43,000	50,800	62,300
Medicinal-Pharmaceutical						
Total	88	51,983	17,944	42,000	48,000	59,900
5-9	24	41,701	5,343	37,800	41,250	44,725
10-14	18	51,047	14,970	43,200	49,000	60,000
15-19	15	52,917	10,943	44,148	54,000	62,000
Organic chemistry						
Total	146	54,245	15,750	43,000	50,000	65,000
5-9	22	38,731	4,883	35,700	38,950	40,800
10-14	27	46,475	9,810	42,000	44,272	46,900
15-19	24	53,840	9,800	47,425	52,550	60,950
20-24	21	63,243	13,284	55,000	63,000	70,000
25-29	15	59,405	17,086	49,900	64,000	67,200
30-34	16	66,981	17,307	52,750	63,800	73,500
Polymer chemistry						
Total	147	58,701	19,024	45,600	55,962	67,750
5-9	19	42,091	5,178	37,500	42,000	47,000
10-14	32	51,259	18,248	41,000	50,000	60,500
15-19	19	60,339	16,442	48,624	56,500	65,000
20-24	25	62,783	13,344	55,962	60,000	69,500
25-29	22	71,018	23,790	53,250	70,000	82,000
Other chemical science						
Total	39	64,197	23,526	46,800	61,000	78,300

Table 2.3.1 (continued)

WORK SPECIALTY YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Business Administration						
Total	38	76,786	28,004	62,000	67,600	85,000
Computer science						
Total	18	56,741	18,845	46,000	53,050	63,100
Other nonchemistry						
Total	43	57,691	15,261	47,000	57,200	67,800
20-24	16	60,730	10,811	51,300	61,040	67,900

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.2

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1992 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	170	70,081	20,627	57,200	67,000	80,000
10-14	32	60,649	18,405	49,300	58,000	67,500
15-19	27	66,318	13,876	60,000	64,500	70,000
20-24	29	71,226	19,108	58,000	65,000	80,000
25-29	34	76,317	18,637	65,000	74,136	86,000
30-34	18	79,134	19,964	62,000	72,000	97,700
Basic research						
Total	109	47,879	12,704	40,000	45,000	53,000
5-9	34	40,451	4,999	36,000	40,840	44,500
10-14	24	45,657	7,022	41,100	44,860	50,600
15-19	16	49,856	10,791	43,950	47,500	59,750
Applied research						
Total	347	51,492	12,584	42,500	49,739	59,100
5-9	58	41,895	4,840	37,900	41,801	45,000
10-14	70	47,244	9,956	40,000	45,000	52,000
15-19	77	52,032	8,248	45,270	52,500	57,000
20-24	42	58,314	12,940	47,700	56,000	66,000
25-29	33	55,705	14,286	48,250	52,500	61,150
30-34	23	60,434	10,515	51,000	60,000	66,000
35-39	19	61,597	15,440	50,000	65,000	70,000
40 or more	15	62,017	15,470	52,000	61,100	70,800
General Mgt						
Total	102	69,522	31,239	49,500	63,000	82,000
15-19	23	66,435	18,140	52,300	60,600	84,000
20-24	21	67,949	29,245	50,000	62,500	78,500
Marketing						
Total	109	57,054	17,816	45,400	55,050	66,700
10-14	28	49,864	15,565	40,400	49,500	55,000
15-19	27	58,188	13,234	50,000	59,500	65,000
20-24	21	65,828	15,630	59,000	66,600	75,475
Production						
Total	123	49,481	14,386	38,000	48,000	57,500
5-9	19	39,196	6,885	35,000	38,280	41,000
10-14	18	44,394	10,831	37,500	39,000	52,000
15-19	23	55,717	14,568	44,200	55,000	61,620
20-24	29	53,924	12,713	42,500	54,000	62,000
Health & Safety						
Total	62	56,494	15,694	45,000	54,800	64,600
Other lab analysis						
Total	87	45,166	13,295	35,200	43,554	52,000
10-14	20	42,525	6,167	38,821	42,500	44,500
20-24	17	49,394	13,097	45,000	48,000	59,500
Consulting						
Total	34	50,732	17,228	42,420	48,000	55,000
Other						
Total	63	53,634	12,379	45,000	53,100	63,100
20-24	17	57,825	8,758	49,500	57,562	65,450

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.3

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by INDUSTRY and YEARS SINCE BS
1992 ACS Salary Survey

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Analytical serv lab						
Total	77	48,592	27,713	35,000	43,050	57,450
5-9	15	36,007	5,113	32,000	35,200	40,000
15-19	20	57,455	16,201	48,843	55,950	63,524
Contract res firm						
Total	27	55,003	20,282	40,000	54,000	57,512
Utility						
Total	20	49,836	13,645	41,000	49,402	60,000
Other nonmanuf						
Total	65	54,502	21,130	40,000	50,000	61,000
Aerospace						
Total	19	53,454	15,188	45,200	52,000	62,000
Basic chemicals						
Total	42	59,902	18,240	46,500	56,000	66,000
Specialty chems						
Total	147	57,474	19,530	43,000	53,013	68,000
5-9	15	40,127	5,443	35,700	38,300	45,500
10-14	24	48,261	11,911	41,250	44,368	52,388
15-19	24	56,509	13,716	44,000	53,600	65,750
20-24	27	61,116	15,826	47,000	60,000	70,000
25-29	30	68,988	25,957	52,500	64,500	86,000
Agricultural chems						
Total	35	53,434	12,768	43,000	54,000	62,000
Coatings						
Total	56	54,659	14,186	45,000	53,500	62,000
10-14	15	49,174	8,249	43,000	49,750	54,800
Electronics						
Total	40	56,109	18,258	40,500	52,500	65,000
Food						
Total	46	56,796	16,101	45,000	54,500	66,000
Instruments						
Total	49	55,723	23,977	42,000	50,000	65,000
15-19	16	56,173	14,192	46,880	60,000	64,000
Medical devices						
Total	36	58,773	18,688	46,800	55,000	72,000
Metals						
Total	21	52,164	12,672	43,554	50,100	59,500
Petroleum						
Total	33	64,319	18,666	48,000	62,000	74,950
Pharmaceuticals						
Total	278	53,975	16,811	42,000	50,000	60,850
5-9	58	41,838	5,909	37,900	40,900	45,000
10-14	59	48,325	9,683	41,000	46,000	52,000
15-19	54	54,374	11,526	47,000	54,000	60,700
20-24	41	61,036	11,136	53,910	59,600	66,824
25-29	19	56,945	10,679	50,000	53,450	65,000
30-34	19	68,069	18,826	54,000	61,000	77,940

Table 2.3.3 (continued)

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Plastics						
Total	53	62,682	20,952	46,750	59,500	75,750
Rubber						
Total	26	55,264	16,836	42,000	52,000	65,000
Other manufactures						
Total	115	55,317	18,538	43,000	51,318	63,336
10-14	21	45,138	8,119	39,262	43,000	53,000
15-19	21	54,602	13,010	45,400	51,000	62,000
20-24	21	60,942	23,664	46,500	56,380	68,250
25-29	15	59,159	12,766	49,900	57,050	68,040

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.4

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by GEOGRAPHIC REGION and YEARS SINCE BS
1992 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	114	58,034	27,887	43,200	52,150	66,000
10-14	24	52,035	11,716	43,621	50,000	60,000
15-19	24	57,201	16,677	44,885	51,829	62,150
20-24	22	61,287	27,994	47,600	54,300	74,950
Mountain						
Total	24	46,492	11,100	39,800	45,900	54,000
West North Central						
Total	64	48,446	13,349	38,000	45,700	57,840
10-14	23	47,291	11,551	36,700	44,500	57,500
West South Central						
Total	91	54,176	20,400	38,642	49,350	63,300
5-9	19	38,451	6,153	33,000	38,000	43,000
15-19	25	54,867	15,762	43,850	52,100	61,810
East North Central						
Total	267	53,365	16,194	43,500	50,044	60,000
5-9	47	41,663	7,573	37,000	40,000	45,000
10-14	40	48,281	10,898	41,179	45,050	52,500
15-19	46	52,172	10,658	45,760	52,250	56,900
20-24	49	58,718	15,132	48,000	58,760	63,000
25-29	26	60,938	19,205	51,000	55,000	74,100
30-34	20	53,933	15,975	46,500	52,000	62,500
35-39	23	67,534	20,615	56,000	64,200	84,600
East South Central						
Total	37	55,309	13,575	46,500	54,000	65,000
Middle Atlantic						
Total	329	58,200	18,574	46,100	54,791	65,750
5-9	35	42,700	6,127	39,000	41,000	48,104
10-14	69	52,614	15,600	43,200	48,500	58,600
15-19	56	58,254	16,200	47,375	54,775	65,000
20-24	46	61,803	13,653	55,200	62,000	67,000
25-29	49	61,821	19,951	49,250	57,000	69,000
30-34	33	65,223	21,572	51,860	61,748	76,470
35-39	22	72,441	27,798	54,000	65,700	83,000
40 or more	15	66,685	10,477	55,000	67,000	75,000
South Atlantic						
Total	166	54,963	17,505	42,500	51,420	65,000
5-9	22	40,493	4,510	36,500	41,400	44,000
10-14	29	44,209	7,720	39,000	45,000	48,600
15-19	30	58,059	13,510	50,000	55,500	67,000
20-24	35	64,192	14,734	55,924	61,794	72,000
25-29	18	69,772	18,496	52,000	68,320	82,000
New England						
Total	96	58,776	20,300	43,674	56,500	68,250
10-14	18	52,286	11,520	45,000	50,500	60,500
15-19	26	58,190	13,267	47,000	58,500	64,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.5

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1992 ACS Salary Survey

SUPERVISORY STATUS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Nonsupervisory						
Total	405	48,383	12,685	39,500	46,000	55,750
2-4	15	32,579	6,138	28,680	36,000	37,000
5-9	83	40,345	6,183	36,000	40,000	43,000
10-14	85	45,476	8,572	41,000	44,272	50,000
15-19	72	50,536	11,052	42,900	49,300	58,000
20-24	50	53,219	11,071	44,900	54,960	62,000
25-29	33	54,298	14,325	48,250	53,550	64,196
30-34	28	52,881	11,689	47,250	53,500	59,900
35-39	25	57,583	18,924	43,500	55,000	69,000
Supervisory						
Total	809	58,967	20,585	45,000	55,200	68,000
5-9	85	41,353	6,877	36,600	41,000	45,000
10-14	145	50,820	14,333	41,000	48,000	58,000
15-19	165	57,968	14,692	48,900	55,000	64,000
20-24	151	63,597	19,075	51,710	60,500	72,000
25-29	104	65,316	19,000	52,000	62,300	75,000
30-34	67	65,430	21,501	51,000	62,747	72,000
35-39	49	79,184	36,795	56,000	68,910	92,930
40 or more	32	70,676	18,015	58,000	69,246	80,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.6

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by TOTAL SUBORDINATES and YEARS SINCE BS
1992 ACS Salary Survey

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	405	48,383	12,685	39,500	46,000	55,750
2-4	15	32,579	6,138	28,680	36,000	37,000
5-9	83	40,345	6,183	36,000	40,000	43,000
10-14	85	45,476	8,572	41,000	44,272	50,000
15-19	72	50,536	11,052	42,900	49,300	58,000
20-24	50	53,219	11,071	44,900	54,960	62,000
25-29	33	54,298	14,325	48,250	53,550	64,196
30-34	28	52,881	11,689	47,250	53,500	59,900
35-39	25	57,583	18,924	43,500	55,000	69,000
1-2						
Total	262	52,494	13,865	43,500	50,000	60,000
5-9	32	39,289	5,927	34,000	39,600	44,250
10-14	42	47,657	10,543	40,080	45,600	51,200
15-19	60	55,116	13,021	45,900	52,600	61,650
20-24	51	56,389	11,014	47,700	55,900	63,000
25-29	37	56,911	16,758	47,350	54,000	63,400
30-34	17	56,023	17,393	48,300	52,000	63,000
3-9						
Total	311	55,176	15,342	44,000	53,950	64,984
5-9	37	42,950	7,314	38,000	42,000	48,155
10-14	72	48,931	12,724	38,900	46,650	58,000
15-19	53	56,021	14,473	48,000	53,100	62,000
20-24	53	58,151	12,297	53,400	58,670	65,500
25-29	37	65,434	15,306	53,900	65,000	74,172
30-34	29	61,491	16,464	49,750	62,150	68,200
35-39	16	65,155	14,192	56,000	63,700	75,474
10-14						
Total	73	58,736	16,587	45,000	59,500	69,000
15-29						
Total	89	67,524	19,294	55,000	65,000	77,500
15-19	25	62,681	12,763	54,000	58,000	70,200
20-24	19	67,612	17,268	55,200	70,000	80,000
30-49						
Total	38	81,552	34,999	60,000	80,000	93,000
50-99						
Total	20	81,831	21,679	60,300	80,500	101,606
100 or more						
Total	16	109,780	35,803	85,000	110,000	138,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.7

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by EMPLOYER SIZE and YEARS SINCE BS
1992 ACS Salary Survey

EMPLOYER SIZE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Less than 2,500						
Total	556	53,469	20,311	40,000	50,000	61,000
5-9	66	39,417	6,925	34,000	39,600	44,000
10-14	122	47,816	13,826	38,900	45,200	55,000
15-19	113	54,208	14,470	44,750	52,000	60,300
20-24	77	54,980	14,965	43,500	55,100	62,000
25-29	69	62,972	21,593	49,350	59,800	75,000
30-34	44	59,076	23,300	43,200	56,000	67,000
35-39	32	68,930	42,446	46,524	59,000	75,000
40 or more	20	69,673	21,709	55,000	69,700	80,000
2,500 or more						
Total	652	57,254	17,625	44,880	53,550	65,000
5-9	101	41,784	6,172	37,800	41,000	45,000
10-14	107	50,144	11,473	42,000	46,900	54,400
15-19	124	57,109	13,661	48,000	54,775	63,900
20-24	123	64,808	18,741	54,420	62,088	72,000
25-29	68	62,432	15,024	51,000	60,000	68,400
30-34	50	64,395	16,199	52,000	60,000	70,770
35-39	41	74,646	24,717	56,000	69,900	91,360
40 or more	26	67,067	14,114	55,000	65,200	77,450

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.1

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by WORK SPECIALTY and YEARS SINCE BS
1992 ACS Salary Survey

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Total	199	71,245	25,058	57,500	65,000	75,000
10-14	46	57,866	9,386	52,000	57,900	62,000
15-19	54	67,078	17,801	58,300	64,458	74,000
20-24	31	77,615	26,694	60,000	73,500	85,000
25-29	30	79,448	19,700	68,000	73,000	90,000
General chemistry						
Total	44	72,138	21,288	58,000	69,500	85,000
Agricultural chem						
Total	112	70,056	25,670	58,300	63,000	77,000
10-14	20	57,122	18,464	49,750	58,300	61,500
15-19	23	61,602	6,022	55,464	61,000	65,000
25-29	23	77,744	14,890	69,300	76,000	84,000
30-34	15	69,590	16,889	58,350	60,000	78,000
Analytical chem						
Total	545	65,243	19,367	53,000	61,300	72,000
5-9	68	50,807	5,423	48,000	51,640	54,131
10-14	108	57,033	9,157	51,349	55,650	61,400
15-19	105	62,076	10,301	55,000	62,000	69,700
20-24	95	66,971	16,138	58,500	65,000	72,576
25-29	85	72,973	17,927	61,000	72,000	84,400
30-34	42	81,776	30,692	62,500	76,380	84,000
35-39	32	84,353	34,274	61,260	75,296	92,000
Environmental chem						
Total	142	67,401	25,088	49,000	61,900	78,100
10-14	31	55,902	29,970	42,000	48,000	58,000
15-19	16	60,632	16,443	50,600	63,254	69,750
20-24	29	69,067	23,042	57,715	62,000	77,000
25-29	23	75,955	18,182	62,400	75,300	90,000
30-34	18	82,862	23,890	70,000	80,940	88,000
Inorganic chem						
Total	109	68,102	20,261	53,500	62,520	76,020
10-14	24	56,694	8,116	52,250	54,750	60,992
15-19	18	61,600	13,556	59,000	62,040	70,000
20-24	17	75,065	18,149	60,000	78,600	90,900
30-34	17	84,166	23,009	72,580	76,000	85,500
Materials science						
Total	185	74,289	22,495	58,920	70,000	85,000
5-9	16	51,283	4,251	49,500	52,000	54,000
10-14	27	60,234	9,404	55,400	59,000	64,000
15-19	22	69,142	11,051	61,500	70,240	77,200
20-24	32	71,985	16,208	62,300	65,000	80,000
25-29	38	85,745	27,081	70,800	80,600	95,000
30-34	26	85,583	17,024	71,318	80,000	100,000
35-39	18	86,609	32,771	62,000	92,500	100,000

Table 2.4.1 (continued)

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Medicinal-Pharm						
Total	284	75,807	29,541	58,100	69,000	83,160
5-9	26	53,249	7,444	51,000	54,600	58,000
10-14	80	61,948	9,570	56,000	60,000	68,000
15-19	46	71,602	12,006	64,000	70,500	80,000
20-24	39	76,445	26,623	60,000	75,000	84,000
25-29	45	98,856	33,156	75,000	92,000	114,000
30-34	18	112,203	54,297	75,000	97,000	150,000
35-39	23	83,797	36,909	70,000	74,000	89,000
Organic chemistry						
Total	513	70,402	24,983	55,000	65,200	80,000
5-9	49	53,074	4,885	50,800	54,000	56,000
10-14	97	56,337	8,401	52,000	55,000	60,410
15-19	90	65,078	12,899	57,500	63,420	74,000
20-24	84	73,249	15,949	62,880	73,000	80,000
25-29	73	78,228	17,444	66,538	76,766	90,350
30-34	50	87,821	41,407	64,465	80,180	95,000
35-39	47	86,116	35,900	68,250	79,000	92,000
40 or more	23	83,100	42,238	65,000	71,200	85,100
Physical chemistry						
Total	157	71,137	19,169	57,100	68,950	82,050
10-14	27	59,241	8,322	51,500	57,600	65,000
15-19	27	64,745	12,383	55,700	64,200	68,520
20-24	28	72,824	12,432	67,000	70,000	80,500
25-29	22	76,963	14,644	69,500	77,000	85,200
30-34	23	80,452	17,175	67,000	82,000	95,000
Polymer chemistry						
Total	469	70,670	24,572	56,000	65,000	80,000
5-9	43	53,308	9,994	50,000	52,440	56,000
10-14	96	56,334	8,696	51,960	56,000	61,000
15-19	85	64,075	11,250	57,000	62,000	69,600
20-24	73	71,743	14,345	60,000	68,800	81,400
25-29	56	78,902	19,633	66,672	75,500	88,170
30-34	49	85,247	33,896	67,000	80,000	90,500
35-39	48	89,680	26,851	73,000	86,960	95,000
40 or more	19	97,426	54,425	68,760	92,000	107,625
Other chemical science						
Total	100	70,075	24,459	53,000	65,000	80,000
5-9	15	48,170	7,108	44,100	49,320	53,000
10-14	17	55,264	8,032	49,800	55,000	60,000
20-24	22	75,319	18,325	62,000	69,000	82,000
25-29	17	94,467	30,899	80,000	91,000	106,000
Business Admin						
Total	46	96,375	37,990	71,000	92,750	109,000
20-24	15	95,767	15,223	91,500	95,000	106,000
Computer science						
Total	44	65,615	12,839	60,000	64,800	72,000
Other nonchemistry						
Total	122	84,931	63,421	61,933	72,000	93,100
25-29	24	81,724	23,317	64,550	76,050	98,500
30-34	27	84,775	35,062	67,000	79,750	90,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.2

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1992 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	676	86,912	30,294	69,912	81,000	96,900
10-14	75	67,917	13,919	58,000	66,600	76,008
15-19	117	72,895	14,703	63,000	72,000	80,500
20-24	132	82,734	16,593	70,000	81,000	93,700
25-29	146	93,576	22,328	80,000	92,000	104,000
30-34	91	99,412	41,134	76,000	85,000	110,000
35-39	67	101,009	45,517	74,500	91,000	112,000
40 or more	37	111,694	43,503	92,500	103,500	126,000
Basic research						
Total	431	64,653	15,645	54,000	61,133	71,700
5-9	67	52,193	5,921	50,000	53,000	55,680
10-14	133	58,355	8,474	53,150	58,150	62,000
15-19	77	64,438	10,404	58,750	64,479	69,750
20-24	57	68,907	14,687	58,500	69,500	76,800
25-29	51	79,133	14,557	69,200	75,000	88,751
30-34	19	83,841	24,961	58,000	80,820	100,000
35-39	19	75,323	22,597	63,000	75,000	87,700
Applied research						
Total	1367	63,771	15,931	53,600	60,000	70,990
5-9	173	50,878	4,832	48,420	51,000	54,000
10-14	304	55,897	7,275	51,600	56,000	60,000
15-19	252	62,059	10,382	55,464	62,000	68,000
20-24	231	66,819	14,786	59,000	65,000	73,550
25-29	157	71,374	16,128	61,000	70,000	78,000
30-34	121	76,396	21,418	63,000	72,000	84,000
35-39	88	80,013	22,060	66,800	75,475	90,960
40 or more	41	70,097	15,205	60,000	68,760	82,000
General Mgt						
Total	158	99,422	62,170	69,700	83,500	110,000
15-19	17	70,418	11,257	61,000	69,700	79,380
20-24	26	93,677	31,931	72,000	90,000	105,000
25-29	40	86,818	29,683	68,000	81,528	98,000
30-34	33	108,416	48,771	70,100	89,112	135,000
35-39	22	132,741	127,801	73,000	101,000	132,000
Marketing						
Total	105	68,191	19,432	58,000	66,250	80,000
10-14	16	53,269	10,562	45,500	53,900	58,500
25-29	28	71,844	17,986	62,000	70,500	80,700
30-34	16	71,076	21,524	57,500	68,775	86,785
Production						
Total	100	62,366	21,183	50,000	57,600	69,100
10-14	18	50,551	7,882	43,000	51,250	55,000
15-19	20	57,115	11,295	48,000	54,500	67,750
25-29	19	74,173	23,363	58,000	69,100	82,000
Health & Safety						
Total	59	73,668	21,691	61,866	72,000	85,000
Other lab analysis						
Total	53	57,614	11,929	51,800	57,200	63,000
10-14	15	53,231	8,470	46,800	54,300	58,920
15-19	18	61,164	8,885	56,859	60,400	63,000

Table 2.4.2 (continued)

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Consulting						
Total	37	64,619	25,907	48,000	60,000	77,000
Other						
Total	136	70,007	21,098	59,000	67,549	80,000
10-14	18	57,669	8,774	55,000	60,000	63,000
15-19	26	69,063	20,209	60,000	64,625	71,000
20-24	27	72,657	18,059	58,000	70,000	85,000
25-29	17	74,214	30,694	60,000	69,000	74,400
30-34	17	78,279	15,799	71,000	82,000	86,000
35-39	17	76,473	16,683	66,859	75,000	89,580

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.3

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by INDUSTRY and YEARS SINCE BS
1992 ACS Salary Survey

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Analytical service lab						
Total	71	60,886	22,414	45,000	58,000	72,000
10-14	15	47,814	13,474	39,000	44,158	55,552
25-29	16	71,946	23,241	54,100	75,150	87,250
Contract res firm						
Total	111	62,248	20,655	48,000	60,000	72,000
10-14	22	51,823	14,097	40,000	49,000	53,500
15-19	15	57,821	9,158	50,000	60,000	65,520
25-29	17	74,076	26,327	60,000	70,100	87,000
30-34	20	70,976	16,847	61,000	70,000	75,750
Other nonmanuf						
Total	89	75,755	70,317	52,000	61,200	81,000
10-14	19	60,599	35,601	45,000	51,600	61,800
25-29	20	85,360	27,638	65,500	80,500	93,500
Aerospace						
Total	68	67,405	20,824	51,588	63,000	78,000
30-34	15	77,593	29,684	63,700	78,000	80,000
Basic chemicals						
Total	232	72,509	19,491	60,000	68,000	81,400
5-9	19	52,599	2,777	50,700	52,740	54,100
10-14	40	57,333	5,867	52,860	55,900	60,460
15-19	40	65,461	8,815	60,000	64,350	70,000
20-24	37	76,430	14,200	66,000	75,000	85,000
25-29	40	84,398	16,348	73,450	81,500	92,500
30-34	26	82,597	16,762	70,500	79,500	85,000
35-39	23	87,436	31,735	68,700	82,000	92,000
Specialty chems						
Total	437	69,440	25,308	54,000	63,200	79,500
5-9	43	50,353	4,679	48,420	50,100	53,000
10-14	76	56,599	7,603	52,000	55,950	60,000
15-19	68	63,086	11,728	57,000	61,100	68,750
20-24	74	70,842	16,761	59,800	68,900	80,000
25-29	56	74,180	18,141	62,500	70,000	87,300
30-34	58	80,515	30,112	63,360	78,000	85,920
35-39	40	84,301	26,920	67,500	83,124	95,000
40 or more	22	100,390	62,255	68,000	82,000	95,000
Agricultural chems						
Total	129	69,359	23,905	56,800	63,225	76,000
10-14	24	58,167	15,151	52,000	56,000	59,575
15-19	35	62,261	7,209	59,000	62,060	65,000
20-24	27	72,653	14,219	60,800	72,928	78,800
Coatings						
Total	109	60,944	13,734	51,000	58,128	70,500
10-14	24	51,644	7,929	48,000	51,128	57,000
15-19	26	59,020	8,337	54,000	58,000	62,000
20-24	19	62,486	12,176	56,000	65,000	71,000

Table 2.4.3 (continued)

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Electronics						
Total	87	72,534	24,724	59,500	70,550	80,000
20-24	21	75,189	12,209	67,560	73,200	80,000
25-29	14	87,989	37,432	72,000	81,000	91,000
Food						
Total	69	69,717	16,021	59,000	68,700	77,000
25-29	17	74,178	12,837	69,300	75,000	77,000
Glass						
Total	18	79,494	29,869	63,600	76,300	100,000
Instruments						
Total	84	66,670	29,131	54,000	59,796	73,000
10-14	22	55,673	8,786	50,000	55,500	58,000
20-24	18	62,568	16,978	53,000	60,000	67,000
Medical devices						
Total	131	66,866	19,255	55,000	63,430	75,000
10-14	30	55,933	10,305	49,300	55,000	60,000
15-19	25	62,110	14,511	52,895	63,000	68,000
20-24	26	68,410	14,207	62,000	68,700	75,000
25-29	20	75,776	21,179	63,886	71,500	82,000
Metals						
Total	35	65,941	22,273	52,000	59,580	70,060
Paper						
Total	50	67,967	15,874	55,300	66,000	79,100
Petroleum						
Total	168	80,220	22,750	61,000	78,220	93,000
5-9	16	54,391	3,269	52,000	54,400	55,840
10-14	20	59,387	8,736	54,600	58,460	61,750
15-19	32	70,273	11,533	61,500	68,550	79,420
20-24	36	81,595	14,372	72,000	80,000	93,000
25-29	23	91,355	21,933	77,900	90,000	101,000
30-34	22	101,670	22,975	84,900	100,640	110,000
Pharmaceuticals						
Total	679	74,848	27,909	58,000	68,000	82,500
5-9	75	53,976	5,684	51,000	54,650	57,000
10-14	166	62,065	9,536	55,620	60,000	67,700
15-19	133	69,644	13,692	62,000	68,000	76,000
20-24	97	78,488	24,648	62,900	73,600	85,000
25-29	89	89,812	27,359	71,000	88,000	104,200
30-34	44	102,753	42,955	72,000	94,350	137,200
35-39	53	95,724	48,309	70,100	81,680	103,690
40 or more	22	93,348	24,749	69,400	94,500	108,000
Plastics						
Total	177	74,166	27,668	56,849	67,250	82,040
5-9	18	53,682	3,473	50,000	53,750	56,900
10-14	33	57,858	7,035	52,500	56,000	60,000
15-19	32	64,641	10,802	58,500	63,500	70,300
20-24	18	74,023	9,377	68,000	73,000	80,000
25-29	27	77,111	19,095	61,000	74,000	89,000
30-34	15	113,600	58,677	78,000	100,000	132,000
35-39	23	92,085	26,942	71,000	88,920	120,000
Rubber						
Total	33	68,722	22,424	52,950	64,325	76,430
Soaps						
Total	36	68,753	18,605	55,700	62,600	81,000

Table 2.4.3 (continued)

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Other manufactures						
Total	316	71,549	25,876	55,000	65,000	82,000
10-14	56	57,181	9,803	52,980	57,650	62,250
15-19	49	64,653	13,813	55,750	62,750	72,000
20-24	51	73,050	18,829	61,600	70,500	83,400
25-29	65	78,117	19,832	64,000	76,000	89,000
30-34	38	92,806	42,472	68,740	77,637	99,000
35-39	21	75,978	23,044	59,880	72,840	92,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.4

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by GEOGRAPHIC REGION and YEARS SINCE BS
1992 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	349	73,298	29,166	56,000	68,000	81,000
5-9	22	50,948	5,605	48,000	51,950	55,000
10-14	75	58,536	14,309	49,000	57,600	64,000
15-19	63	67,761	18,086	58,000	66,000	75,000
20-24	74	76,843	25,027	60,000	74,500	88,000
25-29	47	84,360	26,543	70,000	77,000	100,000
30-34	37	92,152	42,460	71,000	80,000	102,300
35-39	21	88,119	52,209	52,000	78,800	109,000
Mountain						
Total	68	64,650	26,240	49,500	60,000	69,650
West North Central						
Total	184	71,054	24,575	55,000	65,230	80,000
5-9	15	49,437	6,523	49,000	52,050	52,700
10-14	32	55,462	8,632	50,400	57,600	60,400
15-19	32	63,352	10,969	57,500	61,500	70,000
20-24	28	73,149	18,613	66.480	70,000	78,000
25-29	37	82,584	19,928	66,075	80,000	98,000
30-34	20	83,889	37,257	59,000	78,000	92,000
35-39	17	81,548	21,497	72,000	80,000	87,000
West South Central						
Total	222	73,127	25,172	56,000	67,000	85,000
5-9	24	51,249	6,193	49,560	51,950	54,500
10-14	43	56,051	8,632	52,000	56,000	60,000
15-19	36	65,689	14,584	59,000	64,750	74,760
20-24	25	75,774	17,947	60,000	71,000	82,100
25-29	32	79,435	16,564	70,000	77,900	90,000
30-34	28	97,487	39,780	74,500	84,500	108,000
35-39	28	90,986	22,049	72,500	90,480	107,000
East North Central						
Total	597	70,086	21,253	55,747	65,000	80,000
5-9	64	50,125	4,731	48,000	50,900	53,000
10-14	105	59,577	9,271	54,000	58,525	63,502
15-19	109	67,178	10,906	59,100	65,000	75,000
20-24	107	70,905	15,242	60,000	69,750	80,000
25-29	83	81,195	19,891	68,340	76,500	91,000
30-34	62	88,232	29,182	68,000	80,360	100,000
35-39	47	83,416	33,842	65,500	75,125	91,000
40 or more	20	71,374	23,782	48,500	69,400	85,000
East South Central						
Total	82	68,304	22,732	55,300	63,000	72,576
Middle Atlantic						
Total	912	71,801	22,857	57,000	66,520	80,100
5-9	73	52,830	5,747	49,850	52,700	56,015
10-14	185	58,951	13,515	52,100	57,000	62,000
15-19	160	65,560	13,040	58,800	63,750	70,000
20-24	153	72,976	16,888	61,300	72,000	80,976
25-29	138	80,720	19,294	68,450	78,100	93,000
30-34	92	82,669	24,652	68,000	80,000	94,000
35-39	73	91,715	32,153	70,100	83,000	100,000
40 or more	38	98,476	37,737	75,000	93,000	115,000

Table 2.4.4 (continued)

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
South Atlantic						
Total	452	69,361	36,559	55,332	63,180	75,000
5-9	43	52,151	11,034	47,500	52,000	56,500
10-14	94	56,673	9,489	51,480	56,900	61,500
15-19	78	61,567	10,733	55,000	61,000	69,912
20-24	68	69,486	15,622	59,800	65,000	80,000
25-29	75	77,985	18,347	68,540	75,500	86,500
30-34	37	84,276	36,173	68,580	73,200	84,000
35-39	35	95,368	104,709	65,000	73,340	93,500
40 or more	22	91,019	45,942	62,500	82,000	95,000
New England						
Total	223	71,861	31,364	55,200	65,000	78,072
5-9	21	51,998	6,513	46,600	52,000	58,100
10-14	42	57,605	9,780	52,500	56,000	63,000
15-19	35	64,456	12,201	54,000	62,200	73,000
20-24	33	75,372	19,533	65,000	69,000	83,160
25-29	39	77,272	37,351	59,000	67,200	83,000
30-34	23	90,036	46,398	65,000	77,200	98,000
35-39	22	88,599	52,275	61,866	76,850	92,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.5

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1992 ACS Salary Survey

SUPERVISORY STATUS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Nonsupervisory						
Total	650	60,999	19,021	50,899	58,322	68,000
5-9	92	49,651	6,337	46,000	50,100	54,000
10-14	141	53,682	7,974	48,218	54,804	58,000
15-19	100	58,400	10,300	52,098	59,900	64,750
20-24	101	61,421	12,804	53,000	60,000	69,400
25-29	75	67,899	14,248	60,000	69,000	75,000
30-34	64	72,457	25,127	58,000	68,950	80,028
35-39	52	73,488	24,711	60,000	71,000	83,124
40 or more	25	78,965	50,653	52,000	73,000	90,000
Supervisory						
Total	2483	73,803	28,236	58,000	68,000	83,000
5-9	192	52,032	7,089	49,000	52,000	55,000
10-14	464	59,227	12,119	53,000	58,000	64,000
15-19	446	66,607	13,124	59,000	64,900	73,000
20-24	417	75,732	18,802	63,000	72,900	85,000
25-29	405	82,949	23,177	68,900	80,000	94,000
30-34	264	89,927	35,252	70,000	80,000	100,000
35-39	200	92,226	54,858	70,000	82,922	98,000
40 or more	94	94,595	36,645	69,000	91,000	108,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.6

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by TOTAL SUBORDINATES and YEARS SINCE BS
1992 ACS Salary Survey

TOTAL SUBORDINATES AND YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	650	60,999	19,021	50,899	58,322	68,000
5-9	92	49,651	6,337	46,000	50,100	54,000
10-14	141	53,682	7,974	48,218	54,804	58,000
15-19	100	58,400	10,300	52,098	59,900	64,750
20-24	101	61,421	12,804	53,000	60,000	69,400
25-29	75	67,899	14,248	60,000	69,000	75,000
30-34	64	72,457	25,127	58,000	68,950	80,028
35-39	52	73,488	24,711	60,000	71,000	83,124
40 or more	25	78,965	50,653	52,000	73,000	90,000
1-2						
Total	998	64,162	16,861	54,000	60,600	71,000
5-9	123	51,531	5,354	49,800	52,000	54,700
10-14	251	55,702	7,418	51,960	55,500	60,000
15-19	181	62,551	11,460	57,000	61,000	68,000
20-24	143	68,158	12,781	60,000	67,200	75,000
25-29	125	73,353	19,382	62,400	70,000	80,600
30-34	74	77,063	20,167	63,300	72,000	87,000
35-39	75	77,731	27,936	63,720	74,500	85,000
40 or more	26	76,565	14,646	66,700	72,350	88,250
3-9						
Total	842	70,331	18,099	59,000	68,000	80,000
5-9	57	52,518	6,146	49,000	52,500	56,000
10-14	157	60,898	9,493	55,200	60,000	67,382
15-19	177	65,608	10,446	59,000	64,400	72,000
20-24	147	72,016	16,144	62,500	70,000	80,000
25-29	128	77,903	17,871	67,000	76,000	87,000
30-34	89	82,698	22,501	71,000	79,238	88,500
35-39	59	84,077	24,129	70,000	78,800	95,000
40 or more	28	79,969	22,394	65,000	82,000	92,000
10-14						
Total	206	76,754	17,744	64,000	74,500	89,900
10-14	28	65,679	14,102	57,000	64,500	73,000
15-19	32	72,039	11,921	63,750	73,250	79,690
20-24	41	78,398	14,641	68,500	74,250	91,800
25-29	41	82,394	13,941	72,000	84,000	95,000
30-34	31	81,383	19,907	70,000	77,000	90,000
35-39	17	87,270	25,143	66,000	90,000	108,000
15-29						
Total	210	82,959	19,345	70,000	81,500	93,650
10-14	19	68,579	12,784	56,000	66,600	78,500
15-19	45	76,574	12,803	68,000	78,660	84,000
20-24	48	86,382	16,655	75,000	85,500	95,600
25-29	44	88,410	18,532	75,540	90,000	96,300
30-34	24	84,449	25,093	71,000	83,000	100,000
35-39	18	92,988	26,616	70,000	87,000	109,000

Table 2.4.6 (continued)

TOTAL SUBORDINATES AND YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
30-49						
Total	96	106,254	65,432	85,000	95,000	110,000
20-24	21	99,320	22,096	88,000	95,000	108,500
25-29	30	100,589	14,727	92,000	99,500	106,000
50-99						
Total	62	105,380	29,198	88,000	104,000	116,000
25-29	22	100,190	17,653	88,000	100,000	110,000
100 or more						
Total	69	144,628	51,449	105,000	130,000	160,000
25-29	15	128,493	46,780	100,000	118,000	145,000
30-34	21	156,948	54,629	113,400	150,000	200,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.7

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by EMPLOYER SIZE and YEARS SINCE BS
1992 ACS Salary Survey

EMPLOYER SIZE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Less than 2,500						
Total	1106	68,170	32,535	52,000	61,800	75,000
5-9	93	48,071	9,410	44,000	48,000	52,000
10-14	226	55,652	14,000	48,218	55,000	60,000
15-19	182	62,066	15,154	52,897	61,000	71,375
20-24	182	70,569	22,688	57,000	67,000	80,000
25-29	179	75,738	25,223	60,200	72,000	88,000
30-34	118	82,761	35,329	60,000	72,250	94,000
35-39	76	85,819	75,968	60,000	72,000	90,960
40 or more	50	89,749	53,841	60,000	75,000	96,000
2,500 or more						
Total	2013	72,833	23,479	58,000	68,000	82,000
5-9	191	52,839	4,567	50,000	52,500	55,100
10-14	376	59,382	9,493	54,000	58,050	63,000
15-19	364	66,597	11,586	60,000	65,000	72,000
20-24	334	74,385	15,948	63,000	72,000	82,800
25-29	297	83,665	20,555	70,000	80,600	93,533
30-34	207	88,779	33,622	70,100	80,000	96,000
35-39	174	89,714	35,202	70,000	83,062	97,630
40 or more	69	92,273	26,759	73,700	91,000	103,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 3.1.1

SALARIES of GOVERNMENTAL CHEMISTS employed FULL-TIME
by DEGREE and YEARS SINCE BS
1992 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Total	179	42,477	12,817	33,000	40,000	50,000
5-9	26	33,097	7,422	30,432	32,800	37,388
10-14	32	37,341	8,036	31,700	36,498	43,373
15-19	31	41,469	10,852	35,556	39,800	49,290
20-24	26	44,539	10,226	37,680	42,000	50,000
25-29	22	55,673	11,773	48,700	54,680	64,800
30-34	18	49,677	15,002	38,400	50,250	58,500
MS						
Total	151	49,197	13,539	40,000	49,000	56,990
5-9	16	34,645	5,907	29,525	35,250	38,360
10-14	20	42,773	9,800	34,250	42,213	48,145
15-19	26	47,834	10,524	40,000	48,000	54,602
20-24	28	49,176	8,348	44,335	48,258	53,000
25-29	22	58,641	12,185	52,370	59,169	69,000
30-34	19	57,313	11,595	51,000	55,450	62,234
PhD						
Total	415	61,678	16,212	50,516	60,000	71,951
5-9	21	46,662	8,755	38,861	46,000	52,740
10-14	46	48,299	10,537	39,528	49,500	55,000
15-19	59	52,699	10,594	46,836	52,000	60,067
20-24	54	61,763	17,234	50,000	60,000	72,000
25-29	114	64,318	13,863	54,000	62,255	74,000
30-34	58	68,573	12,757	60,070	68,000	77,079
35-39	38	74,486	18,666	63,000	76,573	83,502
40 or more	25	72,410	15,482	63,000	70,500	83,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.1.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by CONTRACT STATUS and RANK
1992 ACS Salary Survey

ACADEMIC RANKS & CONTRACT STATUS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
9-10 month						
Full professor	691	57,582	16,453	47,000	55,300	64,500
Assoc profess	236	41,702	6,904	37,000	41,000	45,750
Asst professor	270	34,809	6,083	31,000	34,100	38,000
Instructor	22	32,524	10,301	24,900	30,500	35,000
No ranks	27	43,692	10,511	36,000	42,000	54,000
11-12 month						
Full professor	283	82,885	27,856	63,500	79,000	96,000
Assoc professor	111	58,039	18,999	48,000	55,000	63,000
Asst professor	71	46,150	17,802	38,000	44,000	52,000
Instructor	25	39,997	9,552	32,000	40,000	46,000
Research appt	122	40,199	14,553	30,000	38,750	48,820
Other nonfacult	50	54,879	25,578	36,000	44,813	79,990

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.2.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and YEARS SINCE PhD = 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANKS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Full professor						
Total	680	57,606	16,511	47,000	55,200	64,400
10-14	24	55,573	19,543	44,000	50,500	61,000
15-19	94	55,977	17,014	45,800	55,100	64,000
20-24	163	54,813	16,642	44,000	51,000	61,000
25-29	188	58,321	15,322	48,250	56,150	64,750
30-34	123	59,053	14,154	48,500	57,250	68,500
35-39	62	61,318	17,248	50,000	58,000	68,000
40+	21	66,884	23,458	47,100	62,000	71,000
Assoc professor						
Total	236	41,702	6,904	37,000	41,000	45,750
5-9	39	41,547	9,082	35,000	40,000	45,000
10-14	70	40,872	5,954	37,183	39,650	43,200
15-19	43	42,571	6,670	38,000	42,000	47,000
20-24	36	42,184	6,228	38,323	42,129	46,500
25-29	26	42,597	5,460	38,000	43,000	48,000
Asst professor						
Total	268	34,793	6,103	30,992	34,000	38,000
2-4	81	34,223	6,705	30,000	33,700	37,000
5-9	128	35,503	5,836	32,000	35,550	39,100
10-14	31	35,346	5,622	31,500	34,637	39,000
Instructor						
Total	21	31,216	3,478	24,900	30,000	35,000
No ranks						
Total	26	43,834	10,693	36,000	42,099	54,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.2.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and YEARS SINCE PhD - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & YEARS SINCE PhD	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Full professor						
Total	280	83,090	27,933	64,000	79,000	96,357
15-19	28	72,675	22,815	57,080	70,675	84,000
20-24	70	78,798	25,352	60,000	72,000	92,000
25-29	81	82,267	23,821	63,000	79,000	95,000
30-34	36	80,276	15,918	70,000	80,750	92,400
35-39	33	102,540	42,037	81,000	96,000	112,000
40+	21	100,325	28,244	79,000	97,000	117,000
Assoc professor						
Total	110	56,931	15,052	48,000	55,000	62,000
10-14	26	56,870	13,657	48,000	55,500	61,000
15-19	27	58,609	15,337	49,000	56,190	61,000
25-29	17	50,609	15,592	45,000	50,000	59,210
Asst professor						
Total	71	46,150	17,802	38,000	44,000	52,000
2-4	16	40,729	6,288	35,500	40,100	45,000
5-9	33	45,772	9,478	40,000	45,000	52,000
Instructor						
Total	25	39,997	9,552	32,000	40,000	46,000
Research appt						
Total	121	40,084	14,557	30,000	38,500	48,000
2-4	19	28,942	8,194	24,000	26,000	35,000
5-9	37	41,710	11,592	30,000	40,300	51,000
10-14	20	40,640	8,633	35,500	39,980	45,500
15-19	22	46,611	14,497	37,074	45,500	55,699
Other nonfaculty						
Total	50	54,879	25,578	36,000	44,813	79,990
20-24	18	56,475	28,374	32,000	50,602	79,990

Note: Cells with fewer than 15 cells have been suppressed.

Table 4.3.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and ACADEMIC WORK FUNCTION - 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & WORK FUNCTION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Teaching						
Full professor	432	51,744	12,276	44,000	50,602	60,000
Assoc professor	161	40,001	5,915	36,000	39,169	43,000
Asst professor	170	32,650	5,246	28,700	32,065	36,000
Instructor	20	31,027	8,653	24,450	30,000	34,300
No ranks	25	43,247	10,608	36,000	40,000	52,500
Research						
Full professor	86	68,348	19,325	56,000	63,000	80,000
Assoc professor	26	46,541	7,072	41,000	45,019	51,000
Asst professor	50	40,061	5,992	36,000	38,000	45,000
Administration						
Full professor	18	69,241	19,256	56,742	59,552	85,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.3.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and ACADEMIC WORK FUNCTION - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & WORK FUNCTION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Teaching						
Full professor	52	55,871	15,441	47,750	55,064	65,050
Assoc professor	26	49,106	10,731	44,000	49,000	58,000
Research						
Full professor	93	91,437	30,384	72,000	84,000	105,000
Assoc professor	45	58,955	16,135	48,000	56,190	68,500
Asst professor	45	45,557	10,015	40,000	45,000	53,000
Research appt	106	38,560	14,481	29,672	37,000	45,076
Administration						
Full professor	58	91,606	22,279	77,000	91,834	102,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.4.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and SPECIALTY - 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & WORK SPECIALTY	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Full professor	65	58,837	17,729	47,212	58,000	65,500
Assoc professor	25	43,389	7,859	38,000	42,400	46,800
Asst professor	34	33,840	6,042	28,475	33,000	37,000
General chemistry						
Full professor	45	47,711	10,667	40,000	47,000	55,000
Assoc professor	16	36,716	5,206	33,500	36,000	40,150
Asst professor	24	31,132	4,064	26,500	32,950	33,656
No ranks	16	42,021	9,535	36,000	39,500	52,500
Analytical chemistry						
Full professor	62	53,183	14,558	45,000	52,000	60,000
Assoc professor	34	40,360	5,741	37,000	40,200	43,000
Asst professor	37	34,039	6,625	31,000	33,477	38,000
Environmental chemistry						
Full professor	20	65,372	18,630	52,000	58,000	81,500
Inorganic chemistry						
Full professor	66	57,348	13,582	49,000	54,400	65,000
Assoc professor	27	41,584	6,671	36,000	41,500	48,000
Asst professor	24	34,686	4,394	32,000	35,400	38,000
Materials science						
Full professor	23	77,570	19,965	60,000	75,000	90,000
Organic chemistry						
Full professor	177	56,557	15,778	47,000	55,000	62,000
Assoc professor	62	40,714	6,183	36,500	38,950	44,000
Asst professor	56	34,135	5,442	30,000	34,200	36,875
Physical chemistry						
Full professor	152	58,187	16,498	47,300	57,350	63,951
Assoc professor	37	43,796	6,733	39,000	43,000	49,900
Asst professor	49	34,965	5,675	31,000	34,000	38,000
Polymer chemistry						
Full professor	23	59,164	8,119	53,000	60,000	66,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.4.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and SPECIALTY - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & WORK SPECIALTY	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Full professor	71	80,116	22,499	63,000	77,000	94,000
Assoc professor	31	56,789	11,497	50,000	54,000	61,200
Asst professor	25	43,669	10,277	38,000	44,000	50,000
Research appt	32	38,707	14,010	29,836	38,700	45,538
Analytical chem						
Full professor	16	72,010	24,006	58,000	69,500	75,844
Research appt	16	42,673	14,076	35,000	40,200	52,485
Inorganic chemistry						
Full professor	16	68,546	21,007	54,504	70,064	82,388
Medicinal-Pharmaceutical						
Full professor	29	102,369	40,613	78,000	96,000	116,000
Assoc professor	19	60,393	10,687	52,000	59,500	64,000
Organic chemistry						
Full professor	34	73,891	29,019	55,000	68,005	85,000
Physical chemistry						
Full professor	24	92,589	28,731	71,223	86,500	118,300
Research appt	16	42,476	19,413	28,730	38,350	48,250
Other nonchemistry						
Full professor	29	87,013	24,885	72,000	83,800	93,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.5.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and TENURE - 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & TENURE STATUS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Yes						
Full professor	673	57,920	16,449	47,000	55,609	65,000
Assoc professor	206	41,987	6,881	37,027	41,000	46,500
Asst professor	25	34,970	3,487	32,900	34,000	37,200
No ranks	18	47,635	9,351	40,000	49,250	55,635
No, in tenure track						
Assoc professor	23	40,527	7,029	35,000	41,800	45,000
Asst professor	223	35,333	6,213	31,000	35,000	39,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.5.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and TENURE - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & TENURE STATUS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Yes						
Full professor	258	83,451	26,374	65,000	79,888	97,000
Assoc professor	72	57,952	17,830	50,000	55,350	61,100
No, in tenure track						
Assoc professor	18	62,361	21,924	49,000	61,500	75,400
Asst professor	46	47,968	18,599	40,000	45,000	53,000
No, not in tenure track						
Asst professor	17	45,704	18,067	36,000	40,800	54,456
Instructor	21	41,377	9,373	34,400	40,000	47,532
Research appt	60	41,895	14,975	30,800	39,300	48,410
Not applicable						
Research appt	56	37,723	14,224	25,650	36,510	48,000
Other nonfaculty	33	57,715	28,217	32,000	51,000	85,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.6.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and INSTITUTIONAL CONTROL - 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & INST. CONTROL	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public						
Full professor	460	58,279	15,148	48,000	55,946	63,602
Assoc professor	149	42,332	6,788	37,183	42,000	45,037
Asst professor	165	35,649	5,988	32,000	35,000	38,000
No ranks	23	45,655	9,993	36,800	45,000	54,000
Private						
Full professor	231	56,193	18,743	42,000	54,400	65,500
Assoc professor	87	40,623	7,007	35,781	39,300	46,500
Asst professor	105	33,489	6,025	29,000	32,523	38,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.6.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and INSTITUTIONAL CONTROL - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & INST. CONTROL	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public						
Full professor	207	83,370	22,475	67,246	80,000	96,000
Assoc professor	74	55,023	9,809	49,000	53,711	60,000
Asst professor	50	45,254	12,374	39,600	43,735	50,000
Instructor	15	42,143	10,575	38,000	40,100	50,000
Research appt	84	39,081	13,943	30,000	37,750	48,410
Other nonfaculty	37	55,136	26,715	36,000	44,500	81,000
Private						
Full professor	76	81,564	39,086	54,000	75,600	102,915
Assoc professor	35	65,299	29,536	44,000	60,000	78,000
Asst professor	21	48,286	26,967	34,000	44,000	54,100
Research appt	38	42,672	15,728	30,000	40,000	51,550

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.7.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and TYPE OF INSTITUTION - 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & TYPE OF INST.	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
NonPhD-granting						
Full professor	321	49,404	10,508	41,000	49,200	57,000
Assoc professor	131	38,737	5,404	35,000	38,000	42,065
Asst professor	151	32,084	4,923	28,475	32,000	35,000
No ranks	27	43,692	10,511	36,000	42,000	54,000
PhD-granting						
Full professor	365	64,793	17,440	52,700	61,361	72,750
Assoc professor	103	45,328	6,850	40,500	43,281	50,000
Asst professor	115	38,289	5,691	34,000	37,400	41,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.7.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and TYPE OF INSTITUTION - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & TYPE OF INST.	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
NonPhD-granting						
Full professor	56	59,687	21,760	47,750	55,120	68,623
Assoc professor	17	46,412	11,613	39,000	47,000	55,000
PhD-granting						
Full professor	174	88,444	25,071	70,500	85,000	100,000
Assoc professor	61	56,249	13,702	48,000	54,600	61,000
Asst professor	39	45,308	9,758	40,000	45,000	52,000
Research appt	103	39,908	15,341	29,672	37,600	49,247
Other nonfaculty	38	50,702	24,948	32,000	41,100	70,000
Medical school						
Full professor	53	89,149	29,885	70,000	81,000	100,000
Assoc professor	33	67,339	25,578	53,423	60,000	71,750
Asst professor	21	47,641	15,094	40,500	42,000	54,400
Research appt	16	39,296	7,174	33,300	40,750	44,038

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.8.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK, INST CONTROL and TYPE OF INSTITUTION - 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & TYPE OF INST.	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public						
NonPhD-granting						
Full professor	192	51,395	8,790	45,000	52,000	58,300
Assoc professor	68	39,264	4,981	35,250	38,567	42,533
Asst professor	73	32,883	5,426	30,000	32,919	35,600
No ranks	23	45,655	9,993	36,800	45,000	54,000
PhD-granting						
Full professor	266	63,294	16,778	52,000	60,000	70,110
Assoc professor	79	44,798	7,108	40,000	43,000	50,000
Asst professor	89	37,799	5,540	34,000	37,000	40,000
Private						
NonPhD-granting						
Full professor	129	46,441	12,083	37,600	45,600	54,500
Assoc professor	63	38,167	5,812	34,000	38,000	42,000
Asst professor	78	31,336	4,303	28,000	30,828	34,200
PhD-granting						
Full professor	99	68,819	18,602	57,700	65,300	78,000
Assoc professor	24	47,071	5,709	42,300	47,050	50,250
Asst professor	26	39,965	5,992	38,000	40,200	42,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.8.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK, INST CONTROL, and TYPE OF INSTITUTION - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & TYPE OF INST.	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public						
NonPhD-granting						
Full professor	28	69,698	23,223	55,004	62,750	80,900
PhD-granting						
Full professor	143	85,892	21,937	70,000	84,000	97,000
Assoc professor	47	54,858	9,998	48,000	53,400	60,000
Asst professor	34	44,860	9,805	40,000	45,000	50,000
Research appt	73	39,105	14,630	29,672	37,000	49,000
Other nonfaculty	28	52,127	26,947	31,500	41,500	76,500
Medical school						
Full professor	36	83,987	20,705	69,400	78,541	95,500
Assoc professor	19	57,331	9,221	50,600	58,000	62,000
Private						
NonPhD-granting						
Full professor	28	49,676	14,743	37,790	49,250	60,500
PhD-granting						
Full professor	31	100,215	34,244	79,000	90,000	122,000
Research appt	30	41,862	17,054	30,000	38,050	52,500
Medical school						
Full professor	17	100,078	42,167	70,000	92,000	120,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.9.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and SEX - 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & SEX	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Men						
Full professor	640	58,150	16,709	47,057	56,000	65,000
Assoc professor	195	41,766	6,903	37,000	41,500	46,000
Asst professor	198	34,777	6,153	30,672	34,418	38,000
No ranks	23	45,308	10,248	36,800	42,197	54,000
Women						
Full professor	50	50,265	10,587	41,000	50,000	59,000
Assoc professor	40	41,540	7,017	36,764	40,187	46,150
Asst professor	72	34,897	5,931	31,203	34,000	38,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.9.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and SEX - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & SEX	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Men						
Full professor	264	83,743	27,765	64,500	79,888	96,357
Assoc professor	101	59,040	19,187	49,000	56,000	63,000
Asst professor	53	47,334	19,112	38,400	45,000	52,000
Research appt	91	42,587	15,018	32,000	40,300	51,000
Other nonfaculty	31	63,501	25,281	39,900	67,000	85,000
Women						
Full professor	18	70,739	27,822	48,000	64,250	92,000
Asst professor	17	42,560	13,447	34,500	40,800	52,000
Research appt	30	33,630	10,351	26,000	30,500	40,000
Other nonfaculty	19	40,813	19,466	27,000	36,000	42,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.10.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and GEOGRAPHIC REGION - 9 or 10 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & REGION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Full professor	87	61,391	17,110	52,000	60,000	65,000
Assoc profess	15	43,228	5,679	39,000	42,000	49,900
Asst professor	27	36,234	5,725	33,000	37,000	39,663
Mountain						
Full professor	36	51,612	9,852	46,155	50,500	57,820
Asst professor	22	33,885	5,555	31,406	33,000	37,000
West North Central						
Full professor	67	49,709	14,682	39,400	49,000	60,000
Assoc professor	17	39,303	8,770	35,000	37,000	39,066
Asst professor	31	32,709	4,039	30,985	32,900	35,000
West South Central						
Full professor	55	51,335	13,332	40,121	48,000	60,600
Assoc professor	22	39,356	4,267	36,000	39,000	42,400
Asst professor	22	36,349	6,286	32,400	35,000	39,690
East North Central						
Full professor	118	56,919	14,850	47,212	55,000	62,000
Assoc professor	50	39,963	6,165	36,000	40,475	43,200
Asst professor	51	33,774	6,371	29,000	32,523	37,000
East South Central						
Full professor	31	49,091	15,410	38,500	45,000	54,000
Middle Atlantic						
Full professor	122	65,683	16,356	55,000	62,000	72,500
Assoc professor	43	43,600	6,257	39,195	42,600	49,000
Asst professor	46	36,674	5,806	33,311	36,625	40,500
South Atlantic						
Full professor	97	55,033	15,232	45,200	53,000	62,000
Assoc professor	49	41,386	5,865	36,000	42,000	44,000
Asst professor	40	33,924	7,202	30,000	34,450	37,600
New England						
Full professor	63	62,745	17,779	52,000	59,000	70,000
Asst professor	21	37,633	5,050	34,000	37,000	40,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.10.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and GEOGRAPHIC REGION - 11 or 12 Month Contract
1992 ACS Salary Survey

ACADEMIC RANK & GEOGRAPHIC REGION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Full professor	31	102,444	35,894	78,000	93,000	125,000
West North Central						
Full professor	18	67,161	21,199	54,000	66,000	83,800
West South Central						
Full professor	29	84,434	26,535	64,000	78,082	100,000
East North Central						
Full professor	48	87,127	28,030	68,400	90,500	100,500
Assoc professor	18	58,312	19,842	47,000	53,711	62,000
Asst professor	15	59,444	31,463	44,470	50,000	55,000
Research appt	23	37,395	14,630	30,000	35,000	45,360
East South Central						
Full professor	22	75,426	24,350	62,000	74,000	90,000
Middle Atlantic						
Full professor	46	79,404	28,011	60,000	80,500	92,000
Assoc professor	15	67,072	34,677	50,000	59,500	71,750
Research appt	19	40,396	14,569	30,000	40,000	51,000
South Atlantic						
Full professor	61	78,254	21,430	60,000	78,000	94,000
Assoc professor	25	55,141	13,889	45,800	54,600	59,850
Research appt	17	39,627	12,092	30,600	42,000	49,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 5.1.1

STIPENDS of POSTDOCTORAL FELLOWS
by INSTITUTIONAL CONTROL and WORK SPECIALTY
1992 ACS Salary Survey

INST CONTROL & WORK SPECIALTY	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Total	41	24,290	4,184	20,000	25,000	27,000
Public	28	23,539	4,203	20,000	24,000	26,000
Chemistry						
Total	141	22,233	3,392	20,000	22,000	25,000
Public	92	22,199	3,479	20,000	22,000	25,000
Private	49	22,297	3,256	20,000	22,000	24,700

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.1.1

SALARIES of CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by DEGREE and YEARS SINCE BS
1992 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Total	207	61,737	39,315	40,300	52,000	70,000
2-4	25	38,834	5,513	35,000	40,000	41,000
5-9	45	42,916	9,511	35,800	40,600	50,000
10-14	26	49,657	13,820	42,000	46,600	55,400
15-19	26	62,850	32,773	42,200	59,831	71,460
20-24	17	59,176	14,398	48,000	60,000	67,000
40 or more	25	91,499	52,472	61,200	72,800	87,000
MS						
Total	199	66,984	22,733	50,000	62,500	78,000
5-9	23	46,142	8,024	41,500	45,500	48,000
10-14	40	57,219	17,941	45,100	54,000	66,031
15-19	31	64,222	12,785	55,800	64,800	73,500
20-24	25	67,145	18,406	53,500	62,500	78,780
25-29	30	75,623	17,292	60,100	74,000	86,500
35-39	16	85,618	30,889	65,846	79,500	92,650
40 or more	18	84,746	31,277	67,860	80,000	99,500
PhD						
Total	224	74,983	25,747	58,000	65,000	88,250
5-9	20	55,527	6,215	51,750	55,800	60,000
10-14	63	58,973	10,119	53,000	58,000	62,000
15-19	26	68,857	14,187	60,000	64,500	72,000
20-24	28	76,461	18,769	63,294	75,000	89,000
25-29	35	87,433	28,264	64,740	79,000	100,000
30-34	24	94,425	23,953	72,465	93,300	111,850
35-39	20	102,449	38,202	74,350	101,000	118,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 7.1.1

EMPLOYMENT STATUS OF ALL RESPONDENTS
by WORK SPECIALTY
1992 Survey of ACS Members

WORK SPECIALTY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Chem engineering	548	18	2	15	9	1	593
Row Percent	92.4%	3.0%	.3%	2.5%	1.5%	.2%	100.0%
Column Percent	5.0%	6.6%	.8%	6.4%	4.1%	6.3%	4.9%
Biochemistry	543	8	52	11	10	1	625
Row Percent	86.9%	1.3%	8.3%	1.8%	1.6%	.2%	100.0%
Column Percent	4.9%	2.9%	19.7%	4.7%	4.5%	6.3%	5.2%
Biotechnology	237	5	9	12	3	0	266
Row Percent	89.1%	1.9%	3.4%	4.5%	1.1%	.0%	100.0%
Column Percent	2.2%	1.8%	3.4%	5.1%	1.4%	.0%	2.2%
General chemistry	485	35	3	6	9	1	539
Row Percent	90.0%	6.5%	.6%	1.1%	1.7%	.2%	100.0%
Column Percent	4.4%	12.8%	1.1%	2.6%	4.1%	6.3%	4.5%
Agricultural chem	307	6	0	6	10	0	329
Row Percent	93.3%	1.8%	.0%	1.8%	3.0%	.0%	100.0%
Column Percent	2.8%	2.2%	.0%	2.6%	4.5%	.0%	2.7%
Analytical chem	1934	33	23	40	31	0	2061
Row Percent	93.8%	1.6%	1.1%	1.9%	1.5%	.0%	100.0%
Column Percent	17.6%	12.0%	8.7%	17.0%	14.1%	.0%	17.2%
Clinical chem	112	6	0	3	3	1	125
Row Percent	89.6%	4.8%	.0%	2.4%	2.4%	.8%	100.0%
Column Percent	1.0%	2.2%	.0%	1.3%	1.4%	6.3%	1.0%
Environmental chem	901	18	5	17	13	0	954
Row Percent	94.4%	1.9%	.5%	1.8%	1.4%	.0%	100.0%
Column Percent	8.2%	6.6%	1.9%	7.2%	5.9%	.0%	7.9%
Inorganic chem	382	9	24	5	7	1	428
Row Percent	89.3%	2.1%	5.6%	1.2%	1.6%	.2%	100.0%
Column Percent	3.5%	3.3%	9.1%	2.1%	3.2%	6.3%	3.6%
Materials science	405	11	7	12	8	0	443
Row Percent	91.4%	2.5%	1.6%	2.7%	1.8%	.0%	100.0%
Column Percent	3.7%	4.0%	2.7%	5.1%	3.6%	.0%	3.7%
Medicinal-Pharmaceutical	612	13	23	11	5	1	665
Row Percent	92.0%	2.0%	3.5%	1.7%	.8%	.2%	100.0%
Column Percent	5.6%	4.7%	8.7%	4.7%	2.3%	6.3%	5.5%

Table 7.1.1 (continued)

WORK SPECIALTY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Organic chemistry	1316	18	53	13	18	0	1418
Row Percent	92.8%	1.3%	3.7%	.9%	1.3%	.0%	100.0%
Column Percent	12.0%	6.6%	20.1%	5.5%	8.2%	.0%	11.8%
Physical chemistry	599	18	13	8	4	0	662
Row Percent	90.5%	2.7%	5.0%	1.2%	.6%	.0%	100.0%
Column Percent	5.4%	6.6%	12.5%	3.4%	1.8%	.0%	5.5%
Polymer chemistry	941	18	12	24	19	1	1015
Row Percent	92.7%	1.8%	1.2%	2.4%	1.9%	.1%	100.0%
Column Percent	8.6%	6.6%	4.5%	10.2%	8.6%	6.3%	8.5%
Other chemical science	209	5	4	5	6	0	229
Row Percent	91.3%	2.2%	1.7%	2.2%	2.6%	.0%	100.0%
Column Percent	1.9%	1.8%	1.5%	2.1%	2.7%	.0%	1.9%
Business Administration	255	10	1	8	4	0	278
Row Percent	91.7%	3.6%	.4%	2.9%	1.4%	.0%	100.0%
Column Percent	2.3%	3.6%	.4%	3.4%	1.8%	.0%	2.3%
Computer science	137	3	0	4	4	0	148
Row Percent	92.6%	2.0%	.0%	2.7%	2.7%	.0%	100.0%
Column Percent	1.2%	1.1%	.0%	1.7%	1.8%	.0%	1.2%
Law	63	4	0	0	4	0	71
Row Percent	88.7%	5.6%	.0%	.0%	5.6%	.0%	100.0%
Column Percent	.6%	1.5%	.0%	.0%	1.8%	.0%	.6%
Other nonchemistry	583	17	4	15	28	1	648
Row Percent	90.0%	2.6%	.6%	2.3%	4.3%	.2%	100.0%
Column Percent	5.3%	6.2%	1.5%	6.4%	12.7%	6.3%	5.4%
No Answer	433	19	9	20	25	8	514
Row Percent	84.2%	3.7%	1.8%	3.9%	4.9%	1.6%	100.0%
Column Percent	3.9%	6.9%	3.4%	8.5%	11.4%	50.0%	4.3%
Total	11002	274	264	235	220	16	12011
Row Percent	91.6%	2.3%	2.2%	2.0%	1.8%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 7.1.2

EMPLOYMENT STATUS OF ALL RESPONDENTS
by EMPLOYER TYPE
1992 Survey of ACS Members

EMPLOYER TYPE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Industry	7052	75	20	157	116	3	7423
Row Percent	95.0%	1.0%	.3%	2.1%	1.6%	.0%	100.0%
Column Percent	64.1%	27.4%	7.6%	66.8%	52.7%	18.8%	61.8%
Government	827	16	25	8	19	0	895
Row Percent	92.4%	1.8%	2.8%	.9%	2.1%	.0%	100.0%
Column Percent	7.5%	5.8%	9.5%	3.4%	8.6%	.0%	7.5%
Other Nonacademic	526	89	13	24	24	5	681
Row Percent	77.2%	13.1%	1.9%	3.5%	3.5%	.7%	100.0%
Column Percent	4.8%	32.5%	4.9%	10.2%	10.9%	31.3%	5.7%
High School	128	7	1	2	9	0	147
Row Percent	87.1%	4.8%	.7%	1.4%	6.1%	.0%	100.0%
Column Percent	1.2%	2.6%	.4%	.9%	4.1%	.0%	1.2%
College or University	2374	78	203	37	37	5	2734
Row Percent	86.8%	2.9%	7.4%	1.4%	1.4%	.2%	100.0%
Column Percent	21.6%	28.5%	76.9%	15.7%	16.8%	31.3%	22.8%
No Answer	95	9	2	7	15	3	131
Row Percent	72.5%	6.9%	1.5%	5.3%	11.5%	2.3%	100.0%
Column Percent	.9%	3.3%	.8%	3.0%	6.8%	18.8%	1.1%
Total	11002	274	264	235	220	16	12011
Row Percent	91.6%	2.3%	2.2%	2.0%	1.8%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.1.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by HIGHEST DEGREE
1992 Survey of ACS Members

HIGHEST DEGREE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
BS	2392	53	6	60	68	3	2582
Row Percent	92.6%	2.1%	.2%	2.3%	2.6%	.1%	100.0%
Column Percent	23.9%	22.1%	2.3%	28.8%	36.4%	25.0%	23.6%
MS	1721	48	4	38	46	3	1860
Row Percent	92.5%	2.6%	.2%	2.0%	2.5%	.2%	100.0%
Column Percent	17.2%	20.0%	1.5%	18.3%	24.6%	25.0%	17.0%
PhD	5871	139	249	109	73	6	6447
Row Percent	91.1%	2.2%	3.9%	1.7%	1.1%	.1%	100.0%
Column Percent	58.6%	57.9%	96.1%	52.4%	39.0%	50.0%	59.0%
No Answer	35	0	0	1	0	0	36
Row Percent	97.2%	.0%	.0%	2.8%	.0%	.0%	100.0%
Column Percent	.3%	.0%	.0%	.5%	.0%	.0%	.3%
Total	10019	240	259	208	187	12	10925
Row Percent	9[illegible].7%	2.2%	2.4%	1.9%	1.7%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.1.2

EMPLOYMENT STATUS OF MEN CHEMISTS
by HIGHEST DEGREE
1992 Survey of ACS Members

HIGHEST DEGREE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
BS	1695	25	2	41	44	1	1808
Row Percent	93.8%	1.4%	.1%	2.3%	2.4%	.1%	100.0%
Column Percent	20.8%	20.3%	1.0%	26.3%	37.0%	14.3%	20.6%
MS	1302	19	2	28	23	1	1375
Row Percent	94.7%	1.4%	.1%	2.0%	1.7%	.1%	100.0%
Column Percent	16.0%	15.4%	1.0%	17.9%	19.3%	14.3%	15.7%
PhD	5135	79	188	86	52	5	5545
Row Percent	92.6%	1.4%	3.4%	1.6%	.9%	.1%	100.0%
Column Percent	62.9%	64.2%	97.9%	55.1%	43.7%	71.4%	63.3%
No Answer	29	0	0	1	0	0	30
Row Percent	96.7%	.0%	.0%	3.3%	.0%	.0%	100.0%
Column Percent	.4%	.0%	.0%	.6%	.0%	.0%	.3%
Total	8161	123	192	156	119	7	8758
Row Percent	93.2%	1.4%	2.2%	1.8%	1.4%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.1.3

EMPLOYMENT STATUS OF WOMEN CHEMISTS
by HIGHEST DEGREE
1992 Survey of ACS Members

HIGHEST DEGREE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
BS	692	27	4	19	24	2	768
Row Percent	90.1%	3.5%	.5%	2.5%	3.1%	.3%	100.0%
Column Percent	37.6%	23.3%	6.1%	37.3%	36.4%	40.0%	35.8%
MS	416	29	2	10	22	2	481
Row Percent	86.5%	6.0%	.4%	2.1%	4.6%	.4%	100.0%
Column Percent	22.6%	25.0%	3.0%	19.6%	33.3%	40.0%	22.4%
PhD	728	60	60	22	20	1	891
Row Percent	81.7%	6.7%	6.7%	2.5%	2.2%	.1%	100.0%
Column Percent	39.5%	51.7%	90.9%	43.1%	30.3%	20.0%	41.5%
No Answer	6	0	0	0	0	0	6
Row Percent	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Column Percent	.3%	.0%	.0%	.0%	.0%	.0%	.3%
Total	1842	116	66	51	66	5	2146
Row Percent	85.8%	5.4%	3.1%	2.4%	3.1%	.2%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.2.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by AGE
1992 Survey of ACS Members

AGE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
20-24	121	3	2	5	2	0	133
Row Percent	91.0%	2.3%	1.5%	3.8%	1.5%	.0%	100.0%
Column Percent	1.2%	1.3%	.8%	2.4%	1.1%	.0%	1.2%
25-29	732	12	[illegible]	20	10	1	862
Row Percent	85.0%	1.4%	[illegible].0%	2.3%	1.2%	.1%	100.0%
Column Percent	7.3%	5.0%	[illegible].2%	9.6%	5.3%	8.3%	7.9%
30-34	1505	32	114	23	13	0	1687
Row Percent	89.2%	1.9%	6.8%	1.4%	.8%	.0%	100.0%
Column Percent	15.0%	13.3%	44.0%	11.1%	7.0%	.0%	15.4%
35-39	1695	44	36	35	17	1	1828
Row Percent	92.7%	2.4%	2.0%	1.9%	.9%	.1%	100.0%
Column Percent	16.9%	18.3%	13.9%	16.8%	9.1%	8.3%	16.7%
40-44	1472	22	14	29	7	0	1544
Row Percent	95.3%	1.4%	.9%	1.9%	.5%	.0%	100.0%
Column Percent	14.7%	9.2%	5.4%	13.9%	3.7%	.0%	14.1%
45-49	1464	21	4	23	7	0	1519
Row Percent	96.4%	1.4%	.3%	1.5%	.5%	.0%	100.0%
Column Percent	14.6%	8.8%	1.5%	11.1%	3.7%	.0%	13.9%
50-54	1251	27	1	32	14	1	1326
Row Percent	94.3%	2.0%	.1%	2.4%	1.1%	.1%	100.0%
Column Percent	12.5%	11.3%	.4%	15.4%	7.5%	8.3%	12.1%
55-59	926	14	1	17	29	3	990
Row Percent	93.5%	1.4%	.1%	1.7%	2.9%	.3%	100.0%
Column Percent	9.2%	5.8%	.4%	8.2%	15.5%	25.0%	9.1%
60-64	628	30	1	16	46	3	724
Row Percent	86.7%	4.1%	.1%	2.2%	6.4%	.4%	100.0%
Column Percent	6.3%	12.5%	.4%	7.7%	24.6%	25.0%	6.6%
65-69	179	33	0	7	38	3	260
Row Percent	68.8%	12.7%	.0%	2.7%	14.6%	1.2%	100.0%
Column Percent	1.8%	13.8%	.0%	3.4%	20.3%	25.0%	2.4%

Table 8.2.1 (continued)

AGE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
70 or more	4	0	0	0	3	0	7
Row Percent	57.1%	.0%	.0%	.0%	42.9%	.0%	100.0%
Column Percent	.0%	.0%	.0%	.0%	1.6%	.0%	.1%
No Answer	41	2	0	1	1	0	45
Row Percent	91.1%	4.4%	.0%	2.2%	2.2%	.0%	100.0%
Column Percent	.4%	.8%	.0%	.5%	.5%	.0%	.4%
Total	10019	240	259	208	187	12	10925
Row Percent	91.7%	2.2%	2.4%	1.9%	1.7%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.3.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by RACE/ETHNICITY
1992 Survey of ACS Members

RACE/ETHNICITY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
American Indian	37	1	0	1	0	0	39
Row Percent	94.9%	2.6%	.0%	2.6%	.0%	.0%	100.0%
Column Percent	.4%	.4%	.0%	.5%	.0%	.0%	.4%
Asian	813	15	86	16	8	0	938
Row Percent	86.7%	1.6%	9.2%	1.7%	.9%	.0%	100.0%
Column Percent	8.1%	6.3%	33.2%	7.7%	4.3%	.0%	8.6%
Black	130	0	2	2	2	0	136
Row Percent	95.6%	.0%	1.5%	1.5%	1.5%	.0%	100.0%
Column Percent	1.3%	.0%	.8%	1.0%	1.1%	.0%	1.2%
White	8766	218	155	182	174	9	9504
Row Percent	92.2%	2.3%	1.6%	1.9%	1.8%	.1%	100.0%
Column Percent	87.5%	90.8%	59.8%	87.5%	93.0%	75.0%	87.0%
Hispanic	142	2	12	4	2	0	162
Row Percent	87.7%	1.2%	7.4%	2.5%	1.2%	.0%	100.0%
Column Percent	1.4%	.8%	4.6%	1.9%	1.1%	.0%	1.5%
Other	61	1	2	2	0	2	68
Row Percent	89.7%	1.5%	2.9%	2.9%	.0%	2.9%	100.0%
Column Percent	.6%	.4%	.8%	1.0%	.0%	16.7%	.6%
No Answer	70	3	2	1	1	1	78
Row Percent	89.7%	3.8%	2.6%	1.3%	1.3%	1.3%	100.0%
Column Percent	.7%	1.3%	.8%	.5%	.5%	8.3%	.7%
Total	10019	240	259	208	187	12	10925
Row Percent	91.7%	2.2%	2.4%	1.9%	1.7%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.4.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by CITIZENSHIP
1992 Survey of ACS Members

CITIZENSHIP	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Native	8487	211	135	179	166	8	9186
Row Percent	92.4%	2.3%	1.5%	1.9%	1.8%	.1%	100.0%
Column Percent	84.7%	87.9%	52.1%	86.1%	88.8%	66.7%	84.1%
Naturalized	907	17	12	12	13	4	965
Row Percent	94.0%	1.8%	1.2%	1.2%	1.3%	.4%	100.0%
Column Percent	9.1%	7.1%	4.6%	5.8%	7.0%	33.3%	8.8%
Permanent resident	471	12	24	9	5	0	521
Row Percent	90.4%	2.3%	4.6%	1.7%	1.0%	.0%	100.0%
Column Percent	4.7%	5.0%	9.3%	4.3%	2.7%	.0%	4.8%
Other visa	145	0	88	6	2	0	241
Row Percent	60.2%	.0%	36.5%	2.5%	.8%	.0%	100.0%
Column Percent	1.4%	.0%	34.0%	2.9%	1.1%	.0%	2.2%
No Answer	9	0	0	2	1	0	12
Row Percent	75.0%	.0%	.0%	16.7%	8.3%	.0%	100.0%
Column Percent	.1%	.0%	.0%	1.0%	.5%	.0%	.1%
Total	10019	240	259	208	187	12	10925
Row Percent	91.7%	2.2%	2.4%	1.9%	1.7%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.5.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by EMPLOYER TYPE
1992 Survey of ACS Members

EMPLOYER TYPE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Industry	6416	63	20	140	100	3	6742
Row Percent	95.2%	.9%	.3%	2.1%	1.5%	.0%	100.0%
Column Percent	64.0%	26.3%	7.7%	67.3%	53.5%	25.0%	61.7%
Government	762	16	25	7	17	0	827
Row Percent	92.1%	1.9%	3.0%	.8%	2.1%	.0%	100.0%
Column Percent	7.6%	6.7%	9.7%	3.4%	9.1%	.0%	7.6%
Other Nonacademic	440	70	13	20	17	5	565
Row Percent	77.9%	12.4%	2.3%	3.5%	3.0%	.9%	100.0%
Column Percent	4.4%	29.2%	5.0%	9.6%	9.1%	41.7%	5.2%
High School	120	7	1	2	6	0	136
Row Percent	88.2%	5.1%	.7%	1.5%	4.4%	.0%	100.0%
Column Percent	1.2%	2.9%	.4%	1.0%	3.2%	.0%	1.2%
College or University	2196	75	198	33	34	3	2539
Row Percent	86.5%	3.0%	7.8%	1.3%	1.3%	.1%	100.0%
Column Percent	21.9%	31.3%	76.4%	15.9%	18.2%	25.0%	23.2%
No Answer	85	9	2	6	13	1	116
Row Percent	73.3%	7.8%	1.7%	5.2%	11.2%	.9%	100.0%
Column Percent	.8%	3.8%	.8%	2.9%	7.0%	8.3%	1.1%
Total	10019	240	259	208	187	12	10925
Row Percent	91.7%	2.2%	2.4%	1.9%	1.7%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.5.2

EMPLOYMENT STATUS OF INDUSTRIAL CHEMISTS
by TYPE OF INDUSTRY
1992 Survey of ACS Members

NONACADEMIC EMPLOYER	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Analytical serv lab	373	5	1	17	8	0	404
Row Percent	92.3%	1.2%	.2%	4.2%	2.0%	.0%	100.0%
Column Percent	5.8%	7.9%	5.0%	12.1%	8.0%	.0%	6.0%
Contract res firm	176	9	2	5	3	0	195
Row Percent	90.3%	4.6%	1.0%	2.6%	1.5%	.0%	100.0%
Column Percent	2.7%	14.3%	10.0%	3.6%	3.0%	.0%	2.9%
Legal firm	8	0	0	1	0	0	9
Row Percent	88.9%	.0%	.0%	11.1%	.0%	.0%	100.0%
Column Percent	.1%	.0%	.0%	.7%	.0%	.0%	.1%
Utility	68	2	0	0	0	0	70
Row Percent	97.1%	2.9%	.0%	.0%	.0%	.0%	100.0%
Column Percent	1.1%	3.2%	.0%	.0%	.0%	.0%	1.0%
Other nonmanuf	262	10	3	7	2	0	284
Row Percent	92.3%	3.5%	1.1%	2.5%	.7%	.0%	100.0%
Column Percent	4.1%	15.9%	15.0%	5.0%	2.0%	.0%	4.2%
Aerospace	123	1	0	6	2	0	132
Row Percent	93.2%	.8%	.0%	4.5%	1.5%	.0%	100.0%
Column Percent	1.9%	1.6%	.0%	4.3%	2.0%	.0%	2.0%
Basic chemicals	353	2	0	5	5	2	367
Row Percent	96.2%	.5%	.0%	1.4%	1.4%	.5%	100.0%
Column Percent	5.5%	3.2%	.0%	3.6%	5.0%	66.7%	5.4%
Specialty chems	832	2	0	22	14	0	870
Row Percent	95.6%	.2%	.0%	2.5%	1.6%	.0%	100.0%
Column Percent	13.0%	3.2%	.0%	15.7%	14.0%	.0%	12.9%
Agricultural chems	220	1	0	4	7	0	232
Row Percent	94.8%	.4%	.0%	1.7%	3.0%	.0%	100.0%
Column Percent	3.4%	1.6%	.0%	2.9%	7.0%	.0%	3.4%
Biochemical prods	69	1	1	5	3	0	79
Row Percent	87.3%	1.3%	1.3%	6.3%	3.8%	.0%	100.0%
Column Percent	1.1%	1.6%	5.0%	3.6%	3.0%	.0%	1.2%
Coatings	262	4	0	3	5	0	274
Row Percent	95.6%	1.5%	.0%	1.1%	1.8%	.0%	100.0%
Column Percent	4.1%	6.3%	.0%	2.1%	5.0%	.0%	4.1%

Table 8.5.2 (continued)

NONACADEMIC EMPLOYER	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Electronics	173	1	2	6	2	0	184
Row Percent	94.0%	.5%	1.1%	3.3%	1.1%	.0%	100.0%
Column Percent	2.7%	1.6%	10.0%	4.3%	2.0%	.0%	2.7%
Food	192	2	0	4	3	0	201
Row Percent	95.5%	1.0%	.0%	2.0%	1.5%	.0%	100.0%
Column Percent	3.0%	3.2%	.0%	2.9%	3.0%	.0%	3.0%
Glass	47	0	0	1	1	0	49
Row Percent	95.9%	.0%	.0%	2.0%	2.0%	.0%	100.0%
Column Percent	.7%	.0%	.0%	.7%	1.0%	.0%	.7%
Instruments	174	3	0	5	0	0	182
Row Percent	95.6%	1.6%	.0%	2.7%	.0%	.0%	100.0%
Column Percent	2.7%	4.8%	.0%	3.6%	.0%	.0%	2.7%
Medical devices	221	4	0	8	4	0	237
Row Percent	93.2%	1.7%	.0%	3.4%	1.7%	.0%	100.0%
Column Percent	3.4%	6.3%	.0%	5.7%	4.0%	.0%	3.5%
Metals	102	0	0	5	1	0	108
Row Percent	94.4%	.0%	.0%	4.6%	.9%	.0%	100.0%
Column Percent	1.6%	.0%	.0%	3.6%	1.0%	.0%	1.6%
Paper	88	0	0	0	0	0	88
Row Percent	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Column Percent	1.4%	.0%	.0%	.0%	.0%	.0%	1.3%
Petroleum	285	1	2	4	7	0	299
Row Percent	95.3%	.3%	.7%	1.3%	2.3%	.0%	100.0%
Column Percent	4.4%	1.6%	10.0%	2.9%	7.0%	.0%	4.4%
Pharmaceuticals	1295	10	8	10	14	1	1338
Row Percent	96.8%	.7%	.6%	.7%	1.0%	.1%	100.0%
Column Percent	20.2%	15.9%	40.0%	7.1%	14.0%	33.3%	19.8%
Plastics	306	0	0	8	5	0	319
Row Percent	95.9%	.0%	.0%	2.5%	1.6%	.0%	100.0%
Column Percent	4.8%	.0%	.0%	5.7%	5.0%	.0%	4.7%
Rubber	115	2	0	2	2	0	121
Row Percent	95.0%	1.7%	.0%	1.7%	1.7%	.0%	100.0%
Column Percent	1.8%	3.2%	.0%	1.4%	2.0%	.0%	1.8%
Soaps	81	1	0	0	1	0	83
Row Percent	97.6%	1.2%	.0%	.0%	1.2%	.0%	100.0%
Column Percent	1.3%	1.6%	.0%	.0%	1.0%	.0%	1.2%

Table 8.5.2 (continued)

NONACADEMIC EMPLOYER	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Other manufactures	591	2	1	12	11	0	617
Row Percent	95.8%	.3%	.2%	1.9%	1.8%	.0%	100.0%
Column Percent	9.2%	3.2%	5.0%	8.6%	11.0%	.0%	9.2%
Total	6416	63	20	140	100	3	6742
Row Percent	95.2%	.9%	.3%	2.1%	1.5%	.0%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.5.3

EMPLOYMENT STATUS OF ACADEMIC CHEMISTS
by INSTITUTIONAL TYPE
1992 Survey of ACS Members

INSTITUTIONAL TYPE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
AA-granting	661	36	1	3	11	0	712
Row Percent	92.8%	5.1%	.1%	.4%	1.5%	.0%	100.0%
Column Percent	30.1%	48.0%	.5%	9.1%	32.4%	.0%	28.0%
BS-granting	2	0	0	0	0	0	2
Row Percent	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Column Percent	.1%	.0%	.0%	.0%	.0%	.0%	.1%
MS-granting	237	10	1	0	1	0	249
Row Percent	95.2%	4.0%	.4%	.0%	.4%	.0%	100.0%
Column Percent	10.8%	13.3%	.5%	.0%	2.9%	.0%	9.8%
PhD-granting	1127	24	185	27	19	2	1384
Row Percent	81.4%	1.7%	13.4%	2.0%	1.4%	.1%	100.0%
Column Percent	51.3%	32.0%	93.4%	81.8%	55.9%	66.7%	54.5%
Medical school	169	5	11	3	3	1	192
Row Percent	88.0%	2.6%	5.7%	1.6%	1.6%	.5%	100.0%
Column Percent	7.7%	6.7%	5.6%	9.1%	8.8%	33.3%	7.6%
Total	2196	75	198	33	34	3	2539
Row Percent	86.5%	3.0%	7.8%	1.3%	1.3%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.6.1

EMPLOYMENT STATUS OF NON-ACADEMIC CHEMISTS
by WORK FUNCTION
1992 Survey of ACS Members

WORK FUNCTION	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
R&D Mgt	1135	12	1	19	15	1	1183
Row Percent	95.9%	1.0%	.1%	1.6%	1.3%	.1%	100.0%
Column Percent	14.9%	8.1%	1.7%	11.4%	11.2%	12.5%	14.5%
Basic research	891	14	45	16	9	0	975
Row Percent	91.4%	1.4%	4.6%	1.6%	.9%	.0%	100.0%
Column Percent	11.7%	9.4%	77.6%	9.6%	6.7%	.0%	12.0%
Applied research	2449	23	11	46	37	2	2568
Row Percent	95.4%	.9%	.4%	1.8%	1.4%	.1%	100.0%
Column Percent	32.1%	15.4%	19.0%	27.5%	27.6%	25.0%	31.6%
General Mgt	597	7	0	12	6	0	622
Row Percent	96.0%	1.1%	.0%	1.9%	1.0%	.0%	100.0%
Column Percent	7.8%	4.7%	.0%	7.2%	4.5%	.0%	7.6%
Marketing	432	6	0	16	1	1	456
Row Percent	94.7%	1.3%	.0%	3.5%	.2%	.2%	100.0%
Column Percent	5.7%	4.0%	.0%	9.6%	.7%	12.5%	5.6%
Production	607	4	0	12	14	0	637
Row Percent	95.3%	.6%	.0%	1.9%	2.2%	.0%	100.0%
Column Percent	8.0%	2.7%	.0%	7.2%	10.4%	.0%	7.8%
Health & Safety	330	9	0	3	8	0	350
Row Percent	94.3%	2.6%	.0%	.9%	2.3%	.0%	100.0%
Column Percent	4.3%	6.0%	.0%	1.8%	6.0%	.0%	4.3%
Forensics	74	1	0	4	0	0	79
Row Percent	93.7%	1.3%	.0%	5.1%	.0%	.0%	100.0%
Column Percent	1.0%	.7%	.0%	2.4%	.0%	.0%	1.0%
Other lab analysis	425	6	1	8	5	0	445
Row Percent	95.5%	1.3%	.2%	1.8%	1.1%	.0%	100.0%
Column Percent	5.6%	4.0%	1.7%	4.8%	3.7%	.0%	5.5%
Teaching	6	2	0	0	0	0	8
Row Percent	75.0%	25.0%	.0%	.0%	.0%	.0%	100.0%
Column Percent	.1%	1.3%	.0%	.0%	.0%	.0%	.1%
Chem info services	91	3	0	3	2	0	99
Row Percent	91.9%	3.0%	.0%	3.0%	2.0%	.0%	100.0%
Column Percent	1.2%	2.0%	.0%	1.8%	1.5%	.0%	1.2%
Computers	65	2	0	3	2	0	72
Row Percent	90.3%	2.8%	.0%	4.2%	2.8%	.0%	100.0%
Column Percent	.9%	1.3%	.0%	1.8%	1.5%	.0%	.9%

Table 8.6.1 (continued)

WORK FUNCTION	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Patents	52	3	0	1	2	0	58
Row Percent	89.7%	5.2%	.0%	1.7%	3.4%	.0%	100.0%
Column Percent	.7%	2.0%	.0%	.6%	1.5%	.0%	.7%
Consulting	217	38	0	10	9	3	277
Row Percent	78.3%	13.7%	.0%	3.6%	3.2%	1.1%	100.0%
Column Percent	2.8%	25.5%	.0%	6.0%	6.7%	37.5%	3.4%
Other	202	14	0	9	11	0	236
Row Percent	85.6%	5.9%	.0%	3.8%	4.7%	.0%	100.0%
Column Percent	2.7%	9.4%	.0%	5.4%	8.2%	.0%	2.9%
No Answer	45	5	0	5	13	1	69
Row Percent	65.2%	7.2%	.0%	7.2%	18.8%	1.4%	100.0%
Column Percent	.6%	3.4%	.0%	3.0%	9.7%	12.5%	.8%
Total	7618	149	58	167	134	8	8134
Row Percent	93.7%	1.8%	.7%	2.1%	1.6%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.7.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by SPECIALTY
1992 Survey of ACS Members

WORK SPECIALITY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Biochemistry	543	8	52	11	10	1	625
Row Percent	86.9%	1.3%	8.3%	1.8%	1.6%	.2%	100.0%
Column Percent	5.4%	3.3%	20.1%	5.3%	5.3%	8.3%	5.7%
Biotechnology	237	5	9	12	3	0	266
Row Percent	89.1%	1.9%	3.4%	4.5%	1.1%	.0%	100.0%
Column Percent	2.4%	2.1%	3.5%	5.8%	1.6%	.0%	2.4%
General chemistry	485	35	3	6	9	1	539
Row Percent	90.0%	6.5%	.6%	1.1%	1.7%	.2%	100.0%
Column Percent	4.8%	14.6%	1.2%	2.9%	4.8%	8.3%	4.9%
Agricultural chem	307	6	0	6	10	0	329
Row Percent	93.3%	1.8%	.0%	1.8%	3.0%	.0%	100.0%
Column Percent	3.1%	2.5%	.0%	2.9%	5.3%	.0%	3.0%
Analytical chem	1934	33	23	40	31	0	2061
Row Percent	93.8%	1.6%	1.1%	1.9%	1.5%	.0%	100.0%
Column Percent	19.3%	13.8%	8.9%	19.2%	16.6%	.0%	18.9%
Clinical chemistry	112	6	0	3	3	1	125
Row Percent	89.6%	4.8%	.0%	2.4%	2.4%	.8%	100.0%
Column Percent	1.1%	2.5%	.0%	1.4%	1.6%	8.3%	1.1%
Environmental chem	901	18	5	17	13	0	954
Row Percent	94.4%	1.9%	.5%	1.8%	1.4%	.0%	100.0%
Column Percent	9.0%	7.5%	1.9%	8.2%	7.0%	.0%	8.7%
Inorganic chem	382	9	24	5	7	1	428
Row Percent	89.3%	2.1%	5.6%	1.2%	1.6%	.2%	100.0%
Column Percent	3.8%	3.8%	9.3%	2.4%	3.7%	8.3%	3.9%
Materials science	405	11	7	12	8	0	443
Row Percent	91.4%	2.5%	1.6%	2.7%	1.8%	.0%	100.0%
Column Percent	4.0%	4.6%	2.7%	5.8%	4.3%	.0%	4.1%
Medicinal-Pharmaceutical	612	13	23	11	5	1	665
Row Percent	92.0%	2.0%	3.5%	1.7%	.8%	.2%	100.0%
Column Percent	6.1%	5.4%	8.9%	5.3%	2.7%	8.3%	6.1%
Organic chemistry	1316	18	53	13	18	0	1418
Row Percent	92.8%	1.3%	3.7%	.9%	1.3%	.0%	100.0%
Column Percent	13.1%	7.5%	20.5%	6.3%	9.6%	.0%	13.0%
Physical chemistry	599	18	33	8	4	0	662
Row Percent	90.5%	2.7%	5.0%	1.2%	.6%	.0%	100.0%
Column Percent	6.0%	7.5%	12.7%	3.8%	2.1%	.0%	6.1%

Table 8.7.1 (continued)

WORK SPECIALITY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Polymer chemistry	941	18	12	24	19	1	1015
Row Percent	92.7%	1.8%	1.2%	2.4%	1.9%	.1%	100.0%
Column Percent	9.4%	7.5%	4.6%	11.5%	10.2%	8.3%	9.3%
Other chem science	209	5	4	5	6	0	229
Row Percent	91.3%	2.2%	1.7%	2.2%	2.6%	.0%	100 0%
Column Percent	2.1%	2.1%	1.5%	2.4%	3.2%	.0%	2.1%
Business Administration	159	6	1	6	1	0	173
Row Percent	91.9%	3.5%	.6%	3.5%	.6%	.0%	100.0%
Column Percent	1.6%	2.5%	.4%	2.9%	.5%	.0%	1.6%
Computer science	113	3	0	3	3	0	122
Row Percent	92.6%	2.5%	.0%	2.5%	2.5%	.0%	100.0%
Column Percent	1.1%	1.3%	.0%	1.4%	1.6%	.0%	1.1%
Law	36	2	0	0	4	0	42
Row Percent	85.7%	4.8%	.0%	.0%	9.5%	.0%	100.0%
Column Percent	.4%	.8%	.0%	.0%	2.1%	.0%	.4%
Other nonchemistry	401	13	2	10	13	1	440
Row Percent	91.1%	3.0%	.5%	2.3%	3.0%	.2%	100.0%
Column Percent	4.0%	5.4%	.8%	4.8%	7.0%	8.3%	4.0%
No Answer	327	13	8	16	20	5	389
Row Percent	84.1%	3.3%	2.1%	4.1%	5.1%	1.3%	100.0%
Column Percent	3.3%	5.4%	3.1%	7.7%	10.7%	41.7%	3.6%
Total	10019	240	259	208	187	12	10925
Row Percent	91.7%	2.2%	2.4%	1.9%	1.7%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.8.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by GEOGRAPHIC REGION
1992 Survey of ACS Members

GEOGRAPHIC REGION	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Pacific	1172	45	48	27	26	1	1319
Row Percent	88.9%	3.4%	3.6%	2.0%	2.0%	.1%	100.0%
Column Percent	11.7%	18.8%	18.5%	13.0%	13.9%	8.3%	12.1%
Mountain	407	11	12	12	4	1	447
Row Percent	91.1%	2.5%	2.7%	2.7%	.9%	.2%	100.0%
Column Percent	4.1%	4.6%	4.6%	5.8%	2.1%	8.3%	4.1%
West North Central	623	12	17	9	8	0	669
Row Percent	93.1%	1.8%	2.5%	1.3%	1.2%	.0%	100.0%
Column Percent	6.2%	5.0%	6.6%	4.3%	4.3%	.0%	6.1%
West South Central	720	18	16	18	18	0	790
Row Percent	91.1%	2.3%	2.0%	2.3%	2.3%	.0%	100.0%
Column Percent	7.2%	7.5%	6.2%	8.7%	9.6%	.0%	7.2%
East North Central	1976	35	33	31	25	0	2100
Row Percent	94.1%	1.7%	1.6%	1.5%	1.2%	.0%	100.0%
Column Percent	19.7%	14.6%	12.7%	14.9%	13.4%	.0%	19.2%
East South Central	384	2	11	6	5	0	408
Row Percent	94.1%	.5%	2.7%	1.5%	1.2%	.0%	100.0%
Column Percent	3.8%	.8%	4.2%	2.9%	2.7%	.0%	3.7%
Middle Atlantic	2233	43	43	43	29	5	2396
Row Percent	93.2%	1.8%	1.8%	1.8%	1.2%	.2%	100.0%
Column Percent	22.3%	17.9%	16.6%	20.7%	15.5%	41.7%	21.9%
South Atlantic	1654	37	47	18	19	2	1777
Row Percent	93.1%	2.1%	2.6%	1.0%	1.1%	.1%	100.0%
Column Percent	16.5%	15.4%	18.1%	8.7%	10.2%	16.7%	16.3%
New England	669	27	28	24	13	0	761
Row Percent	87.9%	3.5%	3.7%	3.2%	1.7%	.0%	100.0%
Column Percent	6.7%	11.3%	10.8%	11.5%	7.0%	.0%	7.0%
No Answer	181	10	4	20	40	3	258
Row Percent	70.2%	3.9%	1.6%	7.8%	15.5%	1.2%	100.0%
Column Percent	1.8%	4.2%	1.5%	9.6%	21.4%	25.0%	2.4%
Total	10019	240	259	208	187	12	10925
Row Percent	91.7%	2.2%	2.4%	1.9%	1.7%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9.1.1

LENGTH OF UNEMPLOYMENT OF CHEMISTS UNEMPLOYED on MARCH 1, 1992
by HIGHEST DEGREE
1991 Survey of ACS Members

HIGHEST DEGREE	LENGTH OF UNEMPLOYMENT						Total
	Less than 1 month	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	No Answer	
BS	6	15	17	7	15	0	60
Row Percent	10.0%	25.0%	28.3%	11.7%	25.0%	.0%	100.0%
Column Percent	26.1%	35.7%	38.6%	16.7%	26.8%	.0%	28.8%
MS	4	6	7	7	13	1	38
Row Percent	10.5%	15.8%	18.4%	18.4%	34.2%	2.6%	100.0%
Column Percent	17.4%	14.3%	15.9%	16.7%	23.2%	100.0%	18.3%
PhD	13	21	20	27	28	0	109
Row Percent	11.9%	19.3%	18.3%	24.8%	25.7%	.0%	100.0%
Column Percent	56.5%	50.0%	45.5%	64.3%	50.0%	.0%	52.4%
No Answer	0	0	0	1	0	0	1
Row Percent	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
Column Percent	.0%	.0%	.0%	2.4%	.0%	.0%	.5%
Total	23	42	44	42	56	1	208
Row Percent	11.1%	20.2%	21.2%	20.2%	26.9%	.5%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.1.1

ALL RESPONDENTS
by SEX and HIGHEST DEGREE
1992 Survey of ACS Members

SEX	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
Men	2033	1678	5948	34	9693
Row Percent	21.0%	17.3%	61.4%	.4%	100.0%
Column Percent	71.6%	75.2%	86.2%	85.0%	80.7%
Women	797	548	944	6	2295
Row Percent	34.7%	23.9%	41.1%	.3%	100.0%
Column Percent	28.1%	24.6%	13.7%	15.0%	19.1%
No Answer	8	4	11	0	23
Row Percent	34.8%	17.4%	47.8%	.0%	100.0%
Column Percent	.3%	.2%	.2%	.0%	.2%
Total	2838	2230	6903	40	12011
Row Percent	23.6%	18.6%	57.5%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.2.1

ALL RESPONDENTS
by AGE and HIGHEST DEGREE
1992 Survey of ACS Members

AGE	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
20-29	586	188	296	3	1073
Row Percent	54.6%	17.5%	27.6%	.3%	100.0%
Column Percent	20.6%	8.4%	4.3%	7.5%	8.9%
30-39	1002	699	2109	12	3822
Row Percent	26.2%	18.3%	55.2%	.3%	100.0%
Column Percent	35.3%	31.3%	30.6%	30.0%	31.8%
40-49	571	687	2068	9	3335
Row Percent	17.1%	20.6%	62.0%	.3%	100.0%
Column Percent	20.1%	30.8%	30.0%	22.5%	27.8%
50-59	430	438	1671	12	2551
Row Percent	16.9%	17.2%	65.5%	.5%	100.0%
Column Percent	15.2%	19.6%	24.2%	30.0%	21.2%
60-69	240	204	722	4	1170
Row Percent	20.5%	17.4%	61.7%	.3%	100.0%
Column Percent	8.5%	9.1%	10.5%	10.0%	9.7%
70 or more	1	1	5	0	7
Row Percent	14.3%	14.3%	71.4%	.0%	100.0%
Column Percent	.0%	.0%	.1%	.0%	.1%
No Answer	8	13	32	0	53
Row Percent	15.1%	24.5%	60.4%	.0%	100.0%
Column Percent	.3%	.6%	.5%	.0%	.4%
Total	2838	2230	6903	40	12011
Row Percent	23.6%	18.6%	57.5%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.2.2

MEN RESPONDENTS
by AGE and HIGHEST DEGREE
1992 Survey of ACS Members

AGE	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
20-29	319	99	200	1	619
Row Percent	51.5%	16.0%	32.3%	.2%	100.0%
Column Percent	15.7%	5.9%	3.4%	2.9%	6.4%
30-39	670	504	1683	9	2866
Row Percent	23.4%	17.6%	58.7%	.3%	100.0%
Column Percent	33.0%	30.0%	28.3%	26.5%	29.6%
40-49	448	551	1820	9	2828
Row Percent	15.8%	19.5%	64.4%	.3%	100.0%
Column Percent	22.0%	32.8%	30.6%	26.5%	29.2%
50-59	372	344	1541	11	2268
Row Percent	16.4%	15.2%	67.9%	.5%	100.0%
Column Percent	18.3%	20.5%	25.9%	32.4%	23.4%
60-69	220	176	678	4	1078
Row Percent	20.4%	16.3%	62.9%	.4%	100.0%
Column Percent	10.8%	10.5%	11.4%	11.8%	11.1%
70 or more	1	1	4	0	6
Row Percent	16.7%	16.7%	66.7%	.0%	100.0%
Column Percent	.0%	.1%	.1%	.0%	.1%
No Answer	3	3	22	0	28
Row Percent	10.7%	10.7%	78.6%	.0%	100.0%
Column Percent	.1%	.2%	.4%	.0%	.3%
Total	2033	1678	5948	34	9693
Row Percent	21.0%	17.3%	61.4%	.4%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.2.3

WOMEN RESPONDENTS
by AGE and HIGHEST DEGREE
1992 Survey of ACS Members

AGE	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
20-29	266	89	95	2	452
Row Percent	58.8%	19.7%	21.0%	.4%	100.0%
Column Percent	33.4%	16.2%	10.1%	33.3%	19.7%
30-39	331	194	423	3	951
Row Percent	34.8%	20.4%	44.5%	.3%	100.0%
Column Percent	41.5%	35.4%	44.8%	50.0%	41.4%
40-49	121	136	245	0	502
Row Percent	24.1%	27.1%	48.8%	.0%	100.0%
Column Percent	15.2%	24.8%	26.0%	.0%	21.9%
50-59	58	94	130	1	283
Row Percent	20.5%	33.2%	45.9%	.4%	100.0%
Column Percent	7.3%	17.2%	13.8%	16.7%	12.3%
60-69	19	28	43	0	90
Row Percent	21.1%	31.1%	47.8%	.0%	100.0%
Column Percent	2.4%	5.1%	4.6%	.0%	3.9%
70 or more	0	0	1	0	1
Row Percent	.0%	.0%	100.0%	.0%	100.0%
Column Percent	.0%	.0%	.1%	.0%	.0%
No Answer	2	7	7	0	16
Row Percent	12.5%	43.8%	43.8%	.0%	100.0%
Column Percent	.3%	1.3%	.7%	.0%	.7%
Total	797	548	944	6	2295
Row Percent	34.7%	23.9%	41.1%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.3.1

ALL RESPONDENTS
by WORK SPECIALTY and HIGHEST DEGREE
1992 Survey of ACS Members

SPECIALTY	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
Chemical engineering	143	158	292	0	593
Row Percent	24.1%	26.6%	49.2%	.0%	100.0%
Column Percent	5.0%	7.1%	4.2%	.0%	4.9%
Biochemistry	50	38	537	0	625
Row Percent	8.0%	6.1%	85.9%	.0%	100.0%
Column Percent	1.8%	1.7%	7.8%	.0%	5.2%
Biotechnology	40	45	181	0	266
Row Percent	15.0%	16.9%	68.0%	.0%	100.0%
Column Percent	1.4%	2.0%	2.6%	.0%	2.2%
General chemistry	161	155	221	2	539
Row Percent	29.9%	28.8%	41.0%	.4%	100.0%
Column Percent	5.7%	7.0%	3.2%	5.0%	4.5%
Agricultural chemistry	82	56	190	1	329
Row Percent	24.9%	17.0%	57.8%	.3%	100.0%
Column Percent	2.9%	2.5%	2.8%	2.5%	2.7%
Analytical chemistry	748	419	886	8	2061
Row Percent	36.3%	20.3%	43.0%	.4%	100.0%
Column Percent	26.4%	18.8%	12.8%	20.0%	17.2%
Clinical chemistry	18	19	88	0	125
Row Percent	14.4%	15.2%	70.4%	.0%	100.0%
Column Percent	.6%	.9%	1.3%	.0%	1.0%
Environmental chemistry	384	215	350	5	954
Row Percent	40.3%	22.5%	36.7%	.5%	100.0%
Column Percent	13.5%	9.6%	5.1%	12.5%	7.9%
Inorganic chemistry	58	55	314	1	428
Row Percent	13.6%	12.9%	73.4%	.2%	100.0%
Column Percent	2.0%	2.5%	4.5%	2.5%	3.6%
Materials science	91	65	284	3	443
Row Percent	20.5%	14.7%	64.1%	.7%	100.0%
Column Percent	3.2%	2.9%	4.1%	7.5%	3.7%

Table 10.3.1 (continued)

ALL RESPONDENTS
by WORK SPECIALTY and HIGHEST DEGREE
1992 Survey of ACS Members

	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
Medicinal-Pharmaceutical	107	104	450	4	665
Row Percent	16.1%	15.6%	67.7%	.6%	100.0%
Column Percent	3.8%	4.7%	6.5%	10.0%	5.5%
Organic chemistry	197	205	1014	2	1418
Row Percent	13.9%	14.5%	71.5%	.1%	100.0%
Column Percent	6.9%	9.2%	14.7%	[illegible]	11.8%
Physical chemistry	47	19	594	2	662
Row Percent	7.1%	2.9%	89.7%	.3%	100.0%
Column Percent	1.7%	.9%	8.6%	5.0%	5.5%
Polymer chemistry	235	174	600	6	1015
Row Percent	23.2%	17.1%	59.1%	.6%	100.0%
Column Percent	8.3%	7.8%	8.7%	15.0%	8.5%
Other chemical science	50	53	126	0	229
Row Percent	21.8%	23.1%	55.0%	.0%	100.0%
Column Percent	1.8%	2.4%	1.8%	.0%	1.9%
Business Administration	63	122	93	0	278
Row Percent	22.7%	43.9%	33.5%	.0%	100.0%
Column Percent	2.2%	5.5%	1.3%	.0%	2.3%
Computer science	32	42	74	0	148
Row Percent	21.6%	28.4%	50.0%	.0%	100.0%
Column Percent	1.1%	1.9%	1.1%	.0%	1.2%
Law	14	7	50	0	71
Row Percent	19.7%	9.9%	70.4%	.0%	100.0%
Column Percent	.5%	.3%	.7%	.0%	.6%
Other nonchemistry	153	162	333	0	648
Row Percent	23.6%	25.0%	51.4%	.0%	100.0%
Column Percent	5.4%	7.3%	4.8%	.0%	5.4%
No Answer	165	117	226	6	514
Row Percent	32.1%	22.8%	44.0%	1.2%	100.0%
Column Percent	5.8%	5.2%	3.3%	15.0%	4.3%
Total	2838	2230	6903	40	12011
Row Percent	23.6%	18.6%	57.5%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.4.1

ALL RESPONDENTS
by RACE/ETHNICITY and HIGHEST DEGREE
1992 Survey of ACS Members

RACE/ETHNICITY	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
American Indian	12	12	18	0	42
Row Percent	28.6%	28.6%	42.9%	.0%	100.0%
Column Percent	.4%	.5%	.3%	.0%	.3%
Asian	100	157	759	0	1016
Row Percent	9.8%	15.5%	74.7%	.0%	100.0%
Column Percent	3.5%	7.0%	11.0%	.0%	8.5%
Black	57	37	53	1	148
Row Percent	38.5%	25.0%	35.8%	.7%	100.0%
Column Percent	2.0%	1.7%	.8%	2.5%	1.2%
White	2590	1962	5872	39	10463
Row Percent	24.8%	18.8%	56.1%	.4%	100.0%
Column Percent	91.3%	88.0%	85.1%	97.5%	87.1%
Hispanic	44	32	103	0	179
Row Percent	24.6%	17.9%	57.5%	.0%	100.0%
Column Percent	1.6%	1.4%	1.5%	.0%	1.5%
Other	16	15	44	0	75
Row Percent	21.3%	20.0%	58.7%	.0%	100.0%
Column Percent	.6%	.7%	.6%	.0%	.6%
No Answer	19	15	54	0	88
Row Percent	21.6%	17.0%	61.4%	.0%	100.0%
Column Percent	.7%	.7%	.8%	.0%	.7%
Total	2838	2230	6903	40	12011
Row Percent	23.6%	18.6%	57.5%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.5.1

ALL RESPONDENTS
by RACE/ETHNICITY and SEX
1992 Survey of ACS Members

RACE/ETHNICITY	SEX			Total
	Men	Women	No Answer	
American Indian	35	7	0	42
Row Percent	83.3%	16.7%	.0%	100.0%
Column Percent	.4%	.3%	.0%	.3%
Asian	804	209	3	1016
Row Percent	79.1%	20.6%	.3%	100.0%
Column Percent	8.3%	9.1%	13.0%	8.5%
Black	96	52	0	148
Row Percent	64.9%	35.1%	.0%	100.0%
Column Percent	1.0%	2.3%	.0%	1.2%
White	8486	1964	13	10463
Row Percent	81.1%	18.8%	.1%	100.0%
Column Percent	87.5%	85.6%	56.5%	87.1%
Hispanic	134	45	0	179
Row Percent	74.9%	25.1%	.0%	100.0%
Column Percent	1.4%	2.0%	.0%	1.5%
Other	61	14	0	75
Row Percent	81.3%	18.7%	.0%	100.0%
Column Percent	.6%	.6%	.0%	.6%
No Answer	77	4	7	88
Row Percent	87.5%	4.5%	8.0%	100.0%
Column Percent	.8%	.2%	30.4%	.7%
Total	9693	2295	23	12011
Row Percent	80.7%	19.1%	.2%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%

Table 10.6.1

ALL RESPONDENTS
by RACE/ETHNICITY and CITIZENSHIP
1992 Survey of ACS Members

RACE/ETHNICITY	CITIZENSHIP					Total
	Native	Natural-ized	Perm Res	Other visa	No Answer	
American Indian	41	1	0	0	0	42
Row Percent	97.6%	2.4%	.0%	.0%	.0%	100.0%
Column Percent	.4%	.1%	.0%	.0%	.0%	.3%
Asian	110	496	256	154	0	1016
Row Percent	10.8%	48.8%	25.2%	15.2%	.0%	100.0%
Column Percent	1.1%	46.7%	45.0%	61.4%	.0%	8.5%
Black	107	17	16	6	2	148
Row Percent	72.3%	11.5%	10.8%	4.1%	1.4%	100.0%
Column Percent	1.1%	1.6%	2.8%	2.4%	13.3%	1.2%
White	9646	467	264	79	7	10463
Row Percent	92.2%	4.5%	2.5%	.8%	.1%	100.0%
Column Percent	95.4%	43.9%	46.4%	31.5%	46.7%	87.1%
Hispanic	92	57	22	8	0	179
Row Percent	51.4%	31.8%	12.3%	4.5%	.0%	100.0%
Column Percent	.9%	5.4%	3.9%	3.2%	.0%	1.5%
Other	41	19	11	4	0	75
Row Percent	54.7%	25.3%	14.7%	5.3%	.0%	100.0%
Column Percent	.4%	1.8%	1.9%	1.6%	.0%	.6%
No Answer	76	6	0	0	6	88
Row Percent	86.4%	6.8%	.0%	.0%	6.8%	100.0%
Column Percent	.8%	.6%	.0%	.0%	40.0%	.7%
Total	10113	1063	569	251	15	12011
Row Percent	84.2%	8.9%	4.7%	2.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.7.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and AGE
1992 Survey of ACS Members

GEOGRAPHIC REGION	AGE							Total
	20-29	30-39	40-49	50-59	60-69	70 or more	No Answer	
Pacific	116	480	437	282	124	1	7	1447
Row Percent	8.0%	33.2%	30.2%	19.5%	8.6%	.1%	.5%	100.0%
Column Percent	10.8%	12.6%	13.1%	11.1%	10.6%	14.3%	13.2%	12.0%
Mountain	32	175	150	93	45	0	1	496
Row Percent	6.5%	35.3%	30.2%	18.8%	9.1%	.0%	.2%	100.0%
Column Percent	3.0%	4.6%	4.5%	3.6%	3.8%	.0%	1.9%	4.1%
West North Central	71	245	190	163	49	0	3	721
Row Percent	9.8%	34.0%	26.4%	22.6%	6.8%	.0%	.4%	100.0%
Column Percent	6.6%	6.4%	5.7%	6.4%	4.2%	.0%	5.7%	6.0%
West South Central	59	290	250	203	96	1	0	899
Row Percent	6.6%	32.3%	27.8%	22.6%	10.7%	.1%	.0%	100.0%
Column Percent	5.5%	7.6%	7.5%	8.0%	8.2%	14.3%	.0%	7.5%
East North Central	252	719	621	486	198	1	10	2287
Row Percent	11.0%	31.4%	27.2%	21.3%	8.7%	.0%	.4%	100.0%
Column Percent	23.5%	18.8%	18.6%	19.1%	16.9%	14.3%	18.9%	19.0%
East South Central	43	143	129	93	49	0	1	458
Row Percent	9.4%	31.2%	28.2%	20.3%	10.7%	.0%	.2%	100.0%
Column Percent	4.0%	3.7%	3.9%	3.6%	4.2%	.0%	1.9%	3.8%
Middle Atlantic	226	820	727	555	281	3	11	2623
Row Percent	8.6%	31.3%	27.7%	21.2%	10.7%	.1%	.4%	100.0%
Column Percent	21.1%	21.5%	21.8%	21.8%	24.0%	42.9%	20.8%	21.8%

Table 10.7.1 (continued)

ALL RESPONDENTS
by GEOGRAPHIC REGION and AGE
1992 Survey of ACS Members

GEOGRAPHIC REGION	AGE							Total
	20-29	30-39	40-49	50-59	60-69	70 or more	No Answer	
South Atlantic	168	610	556	423	187	0	8	1952
Row Percent	8.6%	31.3%	28.5%	21.7%	9.6%	.0%	.4%	100.0%
Column Percent	15.7%	16.0%	16.7%	16.6%	16.0%	.0%	15.1%	16.3%
New England	85	275	215	176	83	0	1	835
Row Percent	10.2%	32.9%	25.7%	21.1%	9.9%	.0%	.1%	100.0%
Column Percent	7.9%	7.2%	6.4%	6.9%	7.1%	.0%	1.9%	7.0%
No Answer	21	65	60	77	58	1	11	293
Row Percent	7.2%	22.2%	20.5%	26.3%	19.8%	.3%	3.8%	100.0%
Column Percent	2.0%	1.7%	1.8%	3.0%	5.0%	14.3%	20.8%	2.4%
Total	1073	3822	3335	2551	1170	7	53	12011
Row Percent	8.9%	31.8%	27.8%	21.2%	9.7%	.1%	.4%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.8.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and WORK FUNCTION
1992 Survey of ACS Members

WORK FUNCTION	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	So. Atl	New England	No Answer	
R&D Mgt	155	29	65	78	232	43	346	217	107	30	1302
Row Percent	11.9%	2.2%	5.0%	6.0%	17.8%	3.3%	26.6%	16.7%	8.2%	2.3%	100.0%
Column Percent	10.7%	5.8%	9.0%	8.7%	10.1%	9.4%	13.2%	11.1%	12.8%	10.2%	10.8%
Basic research	111	28	37	44	197	29	331	191	69	29	1066
Row Percent	10.4%	2.6%	3.5%	4.1%	18.5%	2.7%	31.1%	17.9%	6.5%	2.7%	100.0%
Column Percent	7.7%	5.6%	5.1%	4.9%	8.6%	6.3%	12.6%	9.8%	8.3%	9.9%	8.9%
Applied research	277	98	181	214	618	94	676	419	189	47	2813
Row Percent	9.8%	3.5%	6.4%	7.6%	22.0%	3.3%	24.0%	14.9%	6.7%	1.7%	100.0%
Column Percent	19.1%	19.8%	25.1%	23.8%	27.0%	20.5%	25.8%	21.5%	22.6%	16.0%	23.4%
General Mgt	106	35	46	80	130	35	139	142	37	12	762
Row Percent	13.9%	4.6%	6.0%	10.5%	17.1%	4.6%	18.2%	18.6%	4.9%	1.6%	100.0%
Column Percent	7.3%	7.1%	6.4%	8.9%	5.7%	7.6%	5.3%	7.3%	4.4%	4.1%	6.3%
Marketing	57	15	29	55	112	12	121	73	51	7	532
Row Percent	10.7%	2.8%	5.5%	10.3%	21.1%	2.3%	22.7%	13.7%	9.6%	1.3%	100.0%
Column Percent	3.9%	3.0%	4.0%	6.1%	4.9%	2.6%	4.6%	3.7%	6.1%	2.4%	4.4%
Production	80	28	46	66	136	43	145	101	46	18	709
Row Percent	11.3%	3.9%	6.5%	9.3%	19.2%	6.1%	20.5%	14.2%	6.5%	2.5%	100.0%
Column Percent	5.5%	5.6%	6.4%	7.3%	5.9%	9.4%	5.5%	5.2%	5.5%	6.1%	5.9%
Health & Safety	59	9	27	29	70	19	74	85	24	7	403
Row Percent	14.6%	2.2%	6.7%	7.2%	17.4%	4.7%	18.4%	21.1%	6.0%	1.7%	100.0%
Column Percent	4.1%	1.8%	3.7%	3.2%	3.1%	4.1%	2.8%	4.4%	2.9%	2.4%	3.4%
Forensics	13	7	0	9	20	4	9	20	1	2	85
Row Percent	15.3%	8.2%	.0%	10.6%	23.5%	4.7%	10.6%	23.5%	1.2%	2.4%	100.0%
Column Percent	.9%	1.4%	.0%	1.0%	.9%	.9%	.3%	1.0%	.1%	.7%	.7%

Table 10.8.1 (continued)

WORK FUNCTION	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Atl	New England	No Answer	
Other lab anal	66	29	29	26	97	26	82	56	28	15	454
Row Percent	14.5%	6.4%	6.4%	5.7%	21.4%	5.7%	18.1%	12.3%	6.2%	3.3%	100.0%
Column Percent	4.6%	5.8%	4.0%	2.9%	4.2%	5.7%	3.1%	2.9%	3.4%	5.1%	3.8%
Teaching	8	6	8	6	14	7	19	12	9	6	95
Row Percent	8.4%	6.3%	8.4%	14.7%	14.7%	7.4%	20.0%	12.6%	9.5%	6.3%	100.0%
Column Percent	.6%	1.2%	1.1%	.6%	.6%	1.5%	.7%	.6%	1.1%	2.0%	.8%
Chem info svcs	4	3	2	3	41	2	25	20	6	0	106
Row Percent	3.8%	2.8%	1.9%	2.8%	38.7%	1.9%	23.6%	18.9%	5.7%	.0%	100.0%
Column Percent	.3%	.6%	.3%	.3%	1.8%	.4%	1.0%	1.0%	.7%	.0%	.9%
Computers	15	6	3	7	15	0	22	17	5	4	94
Row Percent	16.0%	6.4%	3.2%	7.4%	16.0%	.0%	23.4%	18.1%	5.3%	4.3%	100.0%
Column Percent	1.0%	1.2%	.4%	.8%	.7%	.0%	.8%	.9%	.6%	1.4%	.8%
Patents	11	0	6	6	21	0	20	14	2	3	83
Row Percent	13.3%	.0%	7.2%	7.2%	25.3%	.0%	24.1%	16.9%	2.4%	3.6%	100.0%
Column Percent	.8%	.0%	.8%	.7%	.9%	.0%	.8%	.7%	.2%	1.0%	.7%
Consulting	79	18	13	24	33	11	81	72	32	17	380
Row Percent	20.8%	4.7%	3.4%	6.3%	8.7%	2.9%	21.3%	18.9%	8.4%	4.5%	100.0%
Column Percent	5.5%	3.6%	1.8%	2.7%	1.4%	2.4%	3.1%	3.7%	3.8%	5.8%	3.2%
Other	45	22	11	26	37	8	77	70	19	13	328
Row Percent	13.7%	6.7%	3.4%	7.9%	11.3%	2.4%	23.5%	21.3%	5.8%	4.0%	100.0%
Column Percent	3.1%	4.4%	1.5%	2.9%	1.6%	1.7%	2.9%	3.6%	2.3%	4.4%	2.7%
No Answer	361	163	218	226	514	125	456	443	210	83	2799
Row Percent	12.9%	5.8%	7.8%	8.1%	18.4%	4.5%	16.3%	15.8%	7.5%	3.0%	100.0%
Column Percent	24.9%	32.9%	30.2%	25.1%	22.5%	27.3%	17.4%	22.7%	25.1%	28.3%	23.3%
Total	1447	496	721	899	2287	458	2623	1952	835	293	12011
Row Percent	12.0%	4.1%	6.0%	7.5%	19.0%	3.8%	21.8%	16.3%	7.0%	2.4%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.9.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and WORK SPECIALTY
1992 Survey of ACS Members

WORK FUNCTION	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Atl	New England	No Answer	
Chemical eng	76	22	30	66	99	28	131	86	39	16	593
Row Percent	12.8%	3.7%	5.1%	11.1%	16.7%	4.7%	22.1%	14.5%	6.6%	2.7%	100.0%
Column Percent	5.3%	4.4%	4.2%	7.3%	4.3%	6.1%	5.0%	4.4%	4.7%	5.5%	4.9%
Biochemistry	79	27	53	45	108	17	122	111	50	13	625
Row Percent	12.6%	4.3%	8.5%	7.2%	17.3%	2.7%	19.5%	17.8%	8.0%	2.1%	100.0%
Column Percent	5.5%	5.4%	7.4%	5.0%	4.7%	3.7%	4.7%	5.7%	6.0%	4.4%	5.2%
Biotechnology	74	11	12	8	36	3	47	40	32	3	266
Row Percent	27.8%	4.1%	4.5%	3.0%	13.5%	1.1%	17.7%	15.0%	12.0%	1.1%	100.0%
Column Percent	5.1%	2.2%	1.7%	.9%	1.6%	.7%	1.8%	2.0%	3.8%	1.0%	2.2%
General chemistry	77	31	40	34	109	17	104	83	29	15	539
Row Percent	14.3%	5.8%	7.4%	6.3%	20.2%	3.2%	19.3%	15.4%	5.4%	2.8%	100.0%
Column Percent	5.3%	6.3%	5.5%	3.8%	4.8%	3.7%	4.0%	4.3%	3.5%	5.1%	4.5%
Agricultural chemistry	48	10	41	14	60	7	63	72	8	6	329
Row Percent	14.6%	3.0%	12.5%	4.3%	18.2%	2.1%	19.1%	21.9%	2.4%	1.8%	100.0%
Column Percent	3.3%	2.0%	5.7%	1.6%	2.6%	1.5%	2.4%	3.7%	1.0%	2.0%	2.7%
Analytical chem	219	95	134	171	425	77	449	351	106	34	2061
Row Percent	10.6%	4.6%	6.5%	8.3%	20.6%	3.7%	21.8%	17.0%	5.1%	1.6%	100.0%
Column Percent	15.1%	19.2%	18.6%	19.0%	18.6%	16.8%	17.1%	18.0%	12.7%	11.6%	17.2%
Clinical chemistry	15	4	8	7	30	6	25	18	11	1	125
Row Percent	12.0%	3.2%	6.4%	5.6%	24.0%	4.8%	20.0%	14.4%	8.8%	.8%	100.0%
Column Percent	1.0%	.8%	1.1%	.8%	1.3%	1.3%	1.0%	.9%	1.3%	.3%	1.0%
Environmental chem	169	62	50	73	176	56	133	158	58	19	954
Row Percent	17.7%	6.5%	5.2%	7.7%	18.4%	5.9%	13.9%	16.6%	6.1%	2.0%	100.0%
Column Percent	11.7%	12.5%	6.9%	8.1%	7.7%	12.2%	5.1%	8.1%	6.9%	6.5%	7.9%

Table 10.9.1 (continued)

WORK FUNCTION	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Atl	New England	No Answer	
Inorganic chem	53	17	22	31	75	16	97	80	29	9	428
Row Percent	12.1%	4.0%	5.1%	7.2$	17.5%	3.7%	22.7%	18.7%	6.8%	2.1%	100.0%
Column Percent	3.6%	3.4%	3.1%	3.4%	3.3%	3.5%	3.7%	4.1%	3.5%	3.1%	3.6%
Materials science	67	20	27	22	83	9	89	67	50	9	443
Row Percent	15.1%	4.5%	6.1%	5.0%	18.7%	2.0%	20.1%	15.1%	11.3%	2.0%	100.0%
Column Percent	4.6%	4.0%	3.7%	2.4%	3.6%	2.0%	3.4%	3.4%	6.0%	3.1%	3.7%
Medicinal/Pharmaceutical	56	12	32	23	117	13	231	101	62	18	665
Row Percent	8.4%	1.8%	4.8%	3.5%	17.6%	2.0%	34.7%	15.2%	9.3%	2.7%	100.0%
Column Percent	9.3%	8.3%	12.8%	13.9%	12.8%	13.1%	13.4%	9.7%	11.6%	11.9%	11.8%
Physical chemistry	105	33	46	45	117	25	140	84	52	15	662
Row Percent	15.9%	5.0%	6.9%	6.8%	17.7%	3.8%	21.1%	12.7%	7.9%	2.3%	100.0%
Column Percent	7.3%	6.7%	6.4%	5.0%	5.1%	5.5%	5.3%	4.3%	6.2%	5.1%	5.5%
Polymer chemistry	50	17	51	94	241	46	249	172	79	16	1015
Row Percent	4.9%	1.7%	5.0%	9.3%	23.7%	4.5%	24.5%	16.9%	7.8%	1.6%	100.0%
Column Percent	3.5%	3.4%	7.1%	10.5%	10.5%	10.0%	9.5%	8.8%	9.5%	5.5%	8.5%
Other chemical science	24	16	10	21	43	5	51	43	13	3	229
Row Percent	10.5%	7.0%	4.4%	9.2%	18.8%	2.2%	22.3%	18.8%	5.7%	1.3%	100.0%
Column Percent	1.7%	3.2%	1.4%	2.3%	1.9%	1.1%	1.9%	2.2%	1.6%	1.0%	1.9%
Business Administration	24	11	18	19	46	12	66	50	25	7	278
Row Percent	8.6%	4.0%	6.5%	6.8%	16.5%	4.3%	23.7%	18.0%	9.0%	2.5%	100.0%
Column Percent	1.7%	2.2%	2.5%	2.1%	2.0%	2.6%	2.5%	2.6%	3.0%	2.4%	2.3%
Computer science	18	9	6	9	26	5	32	27	12	4	148
Row Percent	12.2%	6.1%	4.1%	6.1%	17.6%	3.4%	21.6%	18.2%	8.1%	2.7%	100.0%
Column Percent	1.2%	1.8%	.8%	1.0%	1.1%	1.1%	1.2%	1.4%	1.4%	1.4%	1.2%

Table 10.9.1 (continued)

WORK FUNCTION	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Atl	New England	No Answer	
Law	9	0	3	7	16	0	19	13	2	2	71
Row Percent	12.7%	.0%	4.2%	9.9%	22.5%	.0%	26.8%	18.3%	2.8%	2.8%	100.0%
Column Percent	.6%	.0%	.4%	.8%	.7%	.0%	.7%	.7%	.2%	.7%	.6%
Other nonchemistry	88	37	18	56	106	26	133	131	38	15	648
Row Percent	13.6%	5.7%	2.8%	8.6%	16.4%	4.0%	20.5%	20.2%	5.9%	2.3%	100.0%
Column Percent	6.1%	7.5%	2.5%	6.2%	4.6%	5.7%	5.1%	6.7%	4.6%	5.1%	5.4%
No Answer	62	21	28	29	82	30	90	76	43	53	514
Row Percent	12.1%	4.1%	5.4%	5.6%	16.0%	5.8%	17.5%	14.8%	8.4%	10.3%	100.0%
Column Percent	4.3%	4.2%	3.9%	3.2%	3.6%	6.6%	3.4%	3.9%	5.1%	18.1%	4.3%
Total	1447	496	721	899	2287	458	2623	1952	835	293	12011
Row Percent	12.0%	4.1%	6.0%	7.5%	19.0%	3.8%	21.8%	16.3%	7.0%	2.4%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.10.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and SEX
1992 Survey of ACS Members

GEOGRAPHIC REGION	SEX			Total
	Men	Women	No Answer	
Pacific	1156	290	1	1447
Row Percent	79.9%	20.0%	.1%	100.0%
Column Percent	11.9%	12.6%	4.3%	12.0%
Mountain	402	94	0	496
Row Percent	81.0%	19.0%	.0%	100.0%
Column Percent	4.1%	4.1%	.0%	4.1%
West North Central	603	118	0	721
Row Percent	83.6%	16.4%	.0%	100.0%
Column Percent	6.2%	5.1%	.0%	6.0%
West South Central	745	153	1	899
Row Percent	82.9%	17.0%	.1%	100.0%
Column Percent	7.7%	6.7%	4.3%	7.5%
East North Central	1832	449	6	2287
Row Percent	80.1%	19.6%	.3%	100.0%
Column Percent	18.9%	19.6%	26.1%	19.0%
East South Central	383	75	0	458
Row Percent	83.6%	16.4%	.0%	100.0%
Column Percent	4.0%	3.3%	.0%	3.8%
Middle Atlantic	2147	473	3	2623
Row Percent	81.9%	18.0%	.1%	100.0%
Column Percent	22.2%	20.6%	13.0%	21.8%
South Atlantic	1531	417	4	1952
Row Percent	78.4%	21.4%	.2%	100.0%
Column Percent	15.8%	18.2%	17.4%	16.3%
New England	670	164	1	835
Row Percent	80.2%	19.6%	.1%	100.0%
Column Percent	6.9%	7.1%	4.3%	7.0%
No Answer	224	62	7	293
Row Percent	76.5%	21.2%	2.4%	100.0%
Column Percent	2.3%	2.7%	30.4%	2.4%
Total	9693	2295	23	12011
Row Percent	80.7%	19.1%	.2%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%

Table 10.11.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and HIGHEST DEGREE
1992 Survey of ACS Members

GEOGRAPHIC REGION	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
Pacific	353	249	841	4	1447
Row Percent	24.4%	17.2%	58.1%	.3%	100.0%
Column Percent	12.4%	11.2%	12.2%	10.0%	12.0%
Mountain	125	77	291	3	496
Row Percent	25.2%	15.5%	58.7%	.6%	100.0%
Column Percent	4.4%	3.5%	4.2%	7.5%	4.1%
West North Central	174	108	435	4	721
Row Percent	24.1%	15.0%	60.3%	.6%	100.0%
Column Percent	6.1%	4.8%	6.3%	10.0%	6.0%
West South Central	194	176	525	4	899
Row Percent	21.6%	19.6%	58.4%	.4%	100.0%
Column Percent	6.8%	7.9%	7.6%	10.0%	7.5%
East North Central	631	439	1209	8	2287
Row Percent	27.6%	19.2%	52.9%	.3%	100.0%
Column Percent	22.2%	19.7%	17.5%	20.0%	19.0%
East South Central	129	74	254	1	458
Row Percent	28.2%	16.2%	55.5%	.2%	100.0%
Column Percent	4.5%	3.3%	3.7%	2.5%	3.8%
Middle Atlantic	564	529	1523	7	2623
Row Percent	21.5%	20.2%	58.1%	.3%	100.0%
Column Percent	19.9%	23.7%	22.1%	17.5%	21.8%
South Atlantic	427	332	1188	5	1952
Row Percent	21.9%	17.0%	60.9%	.3%	100.0%
Column Percent	15.0%	14.9%	17.2%	12.5%	16.3%
New England	168	178	487	2	835
Row Percent	20.1%	21.3%	58.3%	.2%	100.0%
Column Percent	5.9%	8.0%	7.1%	5.0%	7.0%
No Answer	73	68	150	2	293
Row Percent	24.9%	23.2%	51.2%	.7%	100.0%
Column Percent	2.6%	3.0%	2.2%	5.0%	2.4%
Total	2838	2230	6903	40	12011
Row Percent	23.6%	18.6%	57.5%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

American Chemical Society

1155 SIXTEENTH STREET, N.W.
WASHINGTON, D.C. 20036
PHONE (202) 872-4534

JOHN K CRUM
Executive Director

February 24, 1992

Dear Colleague:

Each year the American Chemical Society studies the economic status of the U.S. chemical profession by surveying a sample of ACS members. You are one of 20,000 members I am asking to participate in this survey, conducted under the aegis of the Joint Board-Council Committee on Economic Status.

Your participation is an important service to your colleagues, because a high response rate is needed to assure accurate results. Please take a few minutes now to complete the questionnaire and return it in the enclosed business reply envelope. The procedure is strictly confidential. Your name and address will not be coded with the information you provide. It is included only so that we can cross your name off our follow-up list once we have received your completed questionnaire. The information you provide will be combined with returns from other members so that only aggregated data will be available.

Findings will be reported to ACS members in several ways. Early in the summer, *Chemical & Engineering News* will publish a cover story on the salaries and employment status of chemists. At about the same time, the ACS will publish a detailed report entitled "Salaries 1992."

Please feel free to use the back of the questionnaire for whatever comments or suggestions you might care to make.

Thank you for your assistance.

Sincerely,

John K Crum

John K Crum

Enclosure
JKC/jsb

AMERICAN CHEMICAL SOCIETY
1992 Comprehensive Salary and Employment Status Survey

PART I. EDUCATION AND EMPLOYMENT STATUS

1. What is the highest degree you have received to date:

Less than Bachelor's ☐ 1
Bachelor's ☐ 2
Master's ☐ 3
Doctorate ☐ 4
Other (specify) ☐ 5 1

2. Please indicate the year in which you earned any of the following degrees:

Bachelor's 19__ __ 2-3
Master's 19__ __ 4-5
Doctorate 19__ __ 6-7

3. Please check the appropriate box in each column.

	Field of highest degree	The ONE specialty most related to your current or most recent job	
Chemical engineering	☐ 01	☐ 01	
Biochemistry	☐ 02	☐ 02	
Biotechnology	☐ 03	☐ 03	
General chemistry	☐ 04	☐ 04	
Agricultural/food chemistry	☐ 05	☐ 05	
Analytical chemistry	☐ 06	☐ 06	
Clinical chemistry	☐ 07	☐ 07	
Environmental chemistry	☐ 08	☐ 08	
Inorganic chemistry	☐ 09	☐ 09	
Materials science	☐ 10	☐ 10	
Medicinal/pharmaceutical chemistry	☐ 11	☐ 11	
Organic chemistry	☐ 12	☐ 12	
Physical chemistry	☐ 13	☐ 13	
Polymer chemistry	☐ 14	☐ 14	
Other chemical science	☐ 15	☐ 15	
Business Administration	☐ 16	☐ 16	
Computer science	☐ 17	☐ 17	
Law	☐ 18	☐ 18	
Other Non-chemistry	☐ 19	☐ 19	8-11

4. Please enter your primary employment status as of March 1, 1992. Choose the one category that best fits your situation.

Employed full-time (35 hours or more per week) ☐ 1
Employed part-time ☐ 2
Postdoctoral or other fellowship ☐ 3
Not employed but actively seeking employment ☐ 4
Not employed and NOT seeking employment ☐ 5 12

5. If you were NOT EMPLOYED BUT ACTIVELY SEEKING EMPLOYMENT on March 1, 1992, how long had you been unemployed?

Less than 1 month ☐ 1
1 to 3 months ☐ 2
4 to 6 months ☐ 3
7 to 12 months ☐ 4
More than 1 year ☐ 5 13

6. Regardless of your current status, was there any period when you were NOT EMPLOYED AND ACTIVELY SEEKING EMPLOYMENT in calender year 1991?

Yes ☐ 1 No ☐ 1 14

IF YES, how many total weeks were you NOT EMPLOYED AND ACTIVELY SEEKING EMPLOYMENT during calendar year 1991?

_____ **weeks (ENTER A NUMBER FROM 1 to 52)** 15-16

7. If you are CURRENTLY EMPLOYED, how long have you worked for your current employer?

__ __ years __ __ months 17-20

8. What are the first three digits of the ZIP CODE of your current or most recent place of employment?

__ __ __ 20-23

PART II. QUESTIONS ABOUT YOURSELF

1. Your sex:

Male ☐ 1 Female ☐ 2 24

2. Your age at last birthday before March 1, 1992

__ __ years old 25-26

3. Citizenship or visa status:

U.S. native ☐ 1
U.S. naturalized ☐ 2
U.S. permanent resident visa ☐ 3
Other visa ☐ 4 27

4. What is your racial background?

American Indian or Alaskan native ☐ 1
Asian ☐ 2
Black/African-American ☐ 3
White ☐ 4
Other ☐ 5 28

5. Are you of Spanish/Hispanic origin or descent?

Yes ☐ 1 No ☐ 2 29

IF YOU ARE EMPLOYED, EITHER FULL TIME OR PART TIME, PLEASE ANSWER PART III., CURRENT INCOME.

IF YOU ARE NOT CURRENTLY EMPLOYED, PLEASE SKIP TO PART IV, CURRENT OR MOST RECENT JOB.

PART III. CURRENT INCOME

1. BASE ANNUAL SALARY from PRINCIPAL JOB as of March 1, 1992. (DO NOT INCLUDE bonuses, earnings from second job, overtime work, summer teaching, or other supplemental earnings.) If on a 9 or 10 month contract, report the 9 or 10 month salary rather than an annualized salary.

$ _____ per year 30-36

2. TOTAL PROFESSIONAL INCOME during calendar year 1991. (INCLUDE consulting fees, base annual salary, bonuses, earnings from second job, overtime, summer teaching, and other supplemental earnings.)

$ _____ per year 37-43

3. What was your salary LAST YEAR? Please indicate your base annual salary from principal job as of March 1, 1991. (DO NOT include bonuses, earnings from second job, overtime work, summer teaching, or other supplemental earnings.) If on a 9 or 10 month contract, report the 9 or 10 month salary rather than an annualized salary.

$ _____ per year 44-50

PART IV. CURRENT OR MOST RECENT PRIMARY JOB.

IF YOUR CURRENT OR MOST RECENT EMPLOYER IS NOT AN ACADEMIC INSTITUTION, GO TO SECTION B IN THE NEXT COLUMN.

A. CURRENT OR MOST RECENT EMPLOYMENT IS IN AN ACADEMIC INSTITUTION.

1. Current (or most recent) principal employer:

College or university where the highest degree offered in chemistry or chemical engineering is:
- Associate ☐ 1
- Bachelor's ☐ 1
- Master's ☐ 3
- Doctorate ☐ 4

Medical or professional school ☐ 5
High school ☐ 6 51

2. Your employer is a :

Public institution ☐ 1
Private institution ☐ 2 52

3. Your academic rank:

Full professor ☐ 1
Associate professor ☐ 2
Assistant professor ☐ 3
Visiting or adjunct professor, instructor, lecturer ☐ 4
Non-teaching research appointment ☐ 5
Other nonfaculty ☐ 6
My institution does not have ranks ☐ 7 53

4. Have you been granted tenure?

Yes ☐ 1
Not tenured, in tenure track ☐ 2
Not tenured, not in tenure track ☐ 3
Not applicable ☐ 4 54

5. Your basic contract is for a period of:

9 or 10 months ☐ 1
11 or 12 months ☐ 2 55

6. About what fraction of your total working time in the academic year is devoted to:

Teaching	_____%	56-58
Research	_____%	59-61
Administration	_____%	62-64
Other	_____%	65-67
TOTAL	100.0	

THANK YOU. YOU HAVE COMPLETED THE QUESTIONNAIRE. PLEASE USE THE BLANK SPACE ON THE BACK OF THIS FORM FOR COMMENTS.

B. CURRENT OR MOST RECENT EMPLOYMENT IS *NOT* IN AN ACADEMIC INSTITUTION.

1. Current (or most recent) principal employer:

Self-employed ☐ 01
Non-manufacturing:
- Analytical service laboratory ☐ 02
- Contract research firms ☐ 03
- Legal firm ☐ 04
- Utility company ☐ 05
- Other Non-manufacturing (specify)_____ ☐ 06

Manufacturing company primarily involved in:
- Aerospace ☐ 07
- Basic chemicals ☐ 08
- Specialty chemicals ☐ 09
- Agricultural chemicals ☐ 10
- Biochemical products ☐ 11
- Coating, paints, inks ☐ 12
- Electronics ☐ 13
- Food ☐ 14
- Glass, ceramics ☐ 15
- Instruments ☐ 16
- Medical devices/Diagnostic products ☐ 17
- Metals, minerals ☐ 18
- Paper ☐ 19
- Petroleum/natural gas ☐ 20
- Pharmaceuticals, personal care ☐ 21
- Plastics ☐ 22
- Rubber ☐ 23
- Soaps, detergents, surfactants ☐ 24
- Other manufactures (specify)_____ ☐ 25

Government:
- Federal (civilian) ☐ 26
- State or local ☐ 27
- Military ☐ 28

Other non-academic employer:
- Hospital, independent laboratory ☐ 29
- Non-profit organization, other research institution ☐ 30

Other employment ☐ 31 68-69

2. Check the ONE work function that best describes your job.

Research and Development
- Management or administration of R&D ☐ 01
- Basic research ☐ 02
- Applied research, development, design ☐ 03

General management, administration (other than research and development) ☐ 04

Marketing, sales, purchasing, technical service, economic evaluation ☐ 05

Production, quality control ☐ 06

Health and safety/regulatory affairs ☐ 07

Forensic analysis ☐ 08

Other laboratory analysis ☐ 09

Teaching ☐ 10

Chemistry information services ☐ 11

Computer programming, analysis, design ☐ 12

Patents, licensing, trademarks ☐ 13

Consulting ☐ 14

Other ☐ 15 70-71

3. Is your job classified as a:

Technician ☐ 1

Postdoctoral position ☐ 2

Scientist or Engineer ☐ 3

Other ☐ 4 72

4. Were you eligible for a bonus during calendar 1991?

Yes ☐ 1 No ☐ 2 Not applicable ☐ 3 73

5. Did you receive a bonus during calendar 1991?

Yes ☐ 1 No ☐ 2 Not applicable ☐ 3 74

If YES, please indicate amount $_____ 75-80

6. How many people do you supervise, directly or indirectly? Please enter the actual number if it is between 0 and 99; 99 if the number is 100 or more.

Professionals ☐☐ 81-82

Technicians ☐☐ 83-84

Others, including production workers ☐☐ 85-86

7. Employer's approximate number of employees (total for the whole organization):

Less than 500 ☐ 1

500 to 2,499 ☐ 2

2,500 to 9,999 ☐ 3

10,000 to 24,999 ☐ 4

25,000 or more ☐ 5 87

Comments:

THANK YOU FOR YOUR PARTICIPATION.
PLEASE RETURN THIS QUESTIONNAIRE TO:
American Chemical Society
Room 440 Othmer Bldg.
1155 16th Street, N.W.
Washington, DC 20036

ACS CAREER SERVICES PUBLICATIONS

Salaries: The Society annually surveys the ACS membership, gathering detailed information on member chemists and chemical engineers. The reports based on this survey contain statistical tables describing the respondents' employment status, employer, work function and specialty, salaries, and demographic characteristics. Reports are available for each year from 1973 through the current year. For 1987, four separate reports are available: 1987 Salaries of Non-Academic Chemists, 1987 Salaries of Non-Academic Chemical Engineers, 1987 Salaries of Academic Chemists, and 1987 Employment Status and Demographic Characteristics of ACS Members.

Starting Salaries: ACS also surveys new graduates in chemistry and chemical engineering each year,and publishes reports detailing the graduates' employment status, post-graduation plans, starting salaries and other employment and demographic characteristics. Reports are available for each year from 1975.

Women Chemists: Every five years, the Society produces a supplemental report on the economic status of women in the ACS. Reports are available for 1975, 1980, 1985, and 1990.

For prices and ordering information, please call or write:

Distribution Office
American Chemical Society
1155 16th Street, NW
Washington, DC 20036

Toll Free No.: (800) 227-5558

OFFICE OF EMPLOYMENT SERVICES PUBLICATIONS:

CHEMJOBS USA is a weekly bulletin which contains classified ads seeking the chemical professional from up to 20 newspapers and publications throughout the U.S. The ads are abstracted into an easy-to-read format.

Employer Mail List is the mailing list, arranged by state, used to solicit employers for ACS employment services.

Tips on Resume Preparation is a booklet that contains samples of resumes and a cover letter.

The Employment Interview is a checklist that provides a roster of items which will aid in evaluating prospective employers.

For a free copy, please call or write:

Office of Employment Services
American Chemical Society
1155 16th Street, NW
Washington, DC 20036

Toll Free No.: (800) 227-5558

OFFICE OF PROFESSIONAL SERVICES PUBLICATIONS

Workforce Reports: Workforce Reports, which are published three times a year, provide analyses of work force issues. Each issue is devoted to a single topic, for example BS chemists or women chemists. Reports are available from September 1990 through the present.

Suggested Reading List of Job Search Strategies recommends books and other literature covering topics relating to how to find a job including skill identification, resume preparation, cover letters, and interviewing.

Coping with Job Loss describes the trauma of termination and provides information on coping with the emotional, practical, and professional aftermath. Examines the grieving process, reviews sources of help and support, makes recommendations on organizing a job search.

Professional Employment Guidelines (PEG) addresses, for both employer and employee, good employment practices as the basis of sound professional relations. Topics include: terms of employment; employer environment; professional development; termination conditions; definition of multiple terminations; investigation of unprofessional conduct; patent rights for inventors; continuing education; and pension privileges.

Academic Professional Guidelines are extensions of the broader ACS Professional Employment Guidelines (PEG). Outlining reasonable and ethical professional conduct for faculty, students, associates, and administrators, the Guidelines are intended to enhance the relationships between these constituencies; and, to provide assistance on special issues that are of concern to chemical scientists in the academic environment.

Trade Secrets...Ethics and Law is an effort to familiarize chemists and chemical engineers with the technical maze they may encounter in the trade secrets field. This effort is not regarded as a final authoritative say on the subject; but, rather a guide which will alert scientists and engineers to this complex matter. A supplemental reading list is included.

Employment Agreements describes the salient aspects of employment agreements, or employment contracts, as they are often called. The booklet is not necessarily authoritative, nor is it intended to provide legal advice in interpreting the provisions of a specific contract. However, it is hoped that this information will assist the professional scientist or engineer in understanding such agreements and will thereby foster better working relationships between employer and employee. A recommended reading list is included.

ACS Career, Employment and Professional Resources: A Catalog of Publications, Programs & Services

The Chemist's Creed

For a free copy, please call or write:

Office of Professional Services
American Chemical Society
1155 16th Street, NW
Washington, DC 20036

Toll Free No.: (800) 227-5558

USER COMMENTS

Your comments will be helpful in planning future reports. Please let us know how we can provide you with better information.

1. Which sections are or will be of most use to you?

☐ Industry salaries ☐ Academic salaries ☐ Employment status
☐ Government salaries ☐ Chemical engineers salaries ☐ Demographics

2. Which sections should be omitted from future reports and why?

3. If you use industry salaries, which salaries breakdowns are most useful to you?

☐ By specialty ☐ By industry type ☐ By supervisory status
☐ By work function ☐ By geographic region ☐ By number of subordinates
☐ By size of employer

4. If you use academic salaries, which salaries breakdowns are most useful to you?

☐ By years since PhD ☐ By specialty ☐ By institutional control
☐ By work function ☐ By tenure ☐ By type of institution
☐ By geographic region

5. What additional information would you like to see that is not included in this report?

6. If you have purchased this report previously, how often do you purchase it?

☐ Every year ☐ Sporadically
☐ Every other year ☐ Have not purchased it previously
☐ Every few years

7. Do you find the summary and comment useful or not? Why or why not?

8. How do these data compare with data from other sources that you have used?

9. Do you have any other suggestions for improving future surveys and reports?

(Please fold, tape, and mail - postage not required)

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NUMBER 10094 WASHINGTON, D.C.

POSTAGE WILL BE PAID BY ADDRESSEE

AMERICAN CHEMICAL SOCIETY
Attention: **Joan Burrelli**
1155 SIXTEENTH STREET, N.W.
WASHINGTON, D.C. 20077-5768